

Department of Environmental Quality Division of Air Quality

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# **Title V Operating Permit**

**PERMIT NUMBER: 4500048001** 

**DATE OF PERMIT: September 30, 2003** Date of Last Revision: September 30, 2003

This Operating Permit is issued to, and applies to the following:

#### Name of Permittee:

#### **Permitted Location:**

Clean Harbors Aragonite LLC PO Box 22890 Salt Lake City, UT 84122

Hazardous Waste Storage/Incineration 11600 N. Aptus Rd. Aragonite, UT 84029

Site ID: 10725

UTM coordinates: 4,510,930 meters Northing,

333,812 meters Easting

Prepared By:

Robert Grandy

SIC code: 4953

#### **ABSTRACT**

The permitted source is a commercial hazardous waste treatment, storage, and disposal facility (TSDF). Hazardous waste is received from various sources including refineries, chemical manufacturing plants, and coke by-product recovery plants. The off-site material management unit at the source includes sixteen liquid waste storage and blending tanks, two sludge tanks, three bulk solids tanks, and several container management buildings. Waste from the off-site material management unit is treated in an incinerator which includes primary and secondary chambers. The incinerator control system includes a spray dryer, carbon injection, baghouse, saturator, wet scrubber, and wet electrostatic precipitator. The source is major for HAPs, SO<sub>2</sub>, and NO<sub>x</sub>. 40 CFR 60 Subpart Kb, 40 CFR 61 Subparts C, E and FF, and 40 CFR 63 Subparts G, DD, GGG, EEE, U, XX,YY, JJJ, MMM, PPP, and UUUU are applicable requirements for the source.

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By:

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Richard W. Sprott, Executive Secretary

# **Operating Permit History**

9/30/2003 - Permit issued	Action initiated by an initial operating permit application	

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Issued under authority of Utah Code Ann. Section 19-2-104 and 19-2-109.1, and in accordance with Utah Administrative Code R307-415 Operating Permit Requirements.

All definitions, terms and abbreviations used in this permit conform to those used in Utah Administrative Code R307-101 and R307-415 (Rules), and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. Unless noted otherwise, references cited in the permit conditions refer to the Rules.

Where a permit condition in Section I, General Provisions, partially recites or summarizes an applicable rule, the full text of the applicable portion of the rule shall govern interpretations of the requirements of the rule. In the case of a conflict between the Rules and the permit terms and conditions of Section II, Special Provisions, the permit terms and conditions of Section II shall govern except as noted in Provision I.M, Permit Shield.

# **Section I: General Provisions**

#### I.A. Federal Enforcement.

All terms and conditions in this permit, including those provisions designed to limit the potential to emit, are enforceable by the EPA and citizens under the Clean Air Act of 1990 (CAA) except those terms and conditions that are specifically designated as "State Requirements". (R307-415-6b)

# I.B. Permitted Activity(ies).

Except as provided in R307-415-7b(1), the permittee may not operate except in compliance with this permit. (See also Provision I.E, Application Shield)

#### I.C. **Duty to Comply.**

- I.C.1 The permittee must comply with all conditions of the operating permit. Any permit noncompliance constitutes a violation of the Air Conservation Act and is grounds for any of the following: enforcement action; permit termination; revocation and reissuance; modification; or denial of a permit renewal application. (R307-415-6a(6)(a))
- I.C.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (R307-415-6a(6)(b))
- I.C.3 The permittee shall furnish to the Executive Secretary, within a reasonable time, any information that the Executive Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Executive Secretary copies of records required to be kept by this permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA along with a claim of confidentiality. (R307-415-6a(6)(e))
- I.C.4 This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance shall not stay

any permit condition, except as provided under R307-415-7f(1) for minor permit modifications. (R307-415-6a(6)(c))

# I.D. Permit Expiration and Renewal.

- I.D.1 This permit is issued for a fixed term of five years and expires on September 30, 2008. (R307-415-6a(2))
- I.D.2 Application for renewal of this permit is due by March 30, 2008. An application may be submitted early for any reason. (R307-415-5a(1)(c))
- I.D.3 An application for renewal submitted after the due date listed in I.D.2 above shall be accepted for processing, but shall not be considered a timely application and shall not relieve the permittee of any enforcement actions resulting from submitting a late application. (R307-415-5a(5))
- I.D.4 Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted consistent with R307-415-7b (see also Provision I.E, Application Shield) and R307-415-5a(1)(c) (see also Provision I.D.2). (R307-415-7c(2))

#### I.E. Application Shield.

If the permittee submits a timely and complete application for renewal, the permittee's failure to have an operating permit will not be a violation of R307-415, until the Executive Secretary takes final action on the permit renewal application. In such case, the terms and conditions of this permit shall remain in force until permit renewal or denial. This protection shall cease to apply if, subsequent to the completeness determination required pursuant to R307-415-7a(3), and as required by R307-415-5a(2), the applicant fails to submit by the deadline specified in writing by the Executive Secretary any additional information identified as being needed to process the application. (R307-415-7b(2))

#### I.F. Severability.

In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force. (R307-415-6a(5))

#### I.G. **Permit Fee.**

- I.G.1 The permittee shall pay an annual emission fee to the Executive Secretary consistent with R307-415-9. (R307-415-6a(7))
- I.G.2 The emission fee shall be due on October 1 of each calendar year or 45 days after the source receives notice of the amount of the fee, whichever is later. (R307-415-9(4)(a))

#### I.H. No Property Rights.

This permit does not convey any property rights of any sort, or any exclusive privilege. (R307-415-6a(6)(d))

#### I.I. Revision Exception.

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (R307-415-6a(8))

# I.J. Inspection and Entry.

- I.J.1 Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Executive Secretary or an authorized representative to perform any of the following:
- I.J.1.a Enter upon the permittee's premises where the source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit. (R307-415-6c(2)(a))
- I.J.1.b Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit. (R307-415-6c(2)(b))
- I.J.1.c Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practice, or operation regulated or required under this permit. (R307-415-6c(2)(c))
- I.J.1.d Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements. (R307-415-6c(2)(d))
- I.J.2 Any claims of confidentiality made on the information obtained during an inspection shall be made pursuant to Utah Code Ann. Section 19-1-306. (R307-415-6c(2)(e))

#### I.K. Certification.

Any application form, report, or compliance certification submitted pursuant to this permit shall contain certification as to its truth, accuracy, and completeness, by a responsible official as defined in R307-415-3. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R307-415-5d)

#### I.L. Compliance Certification.

- I.L.1 Permittee shall submit to the Executive Secretary an annual compliance certification, certifying compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall be submitted no later than **September 22**, **2004** and that date each year following until this permit expires. The certification shall include all the following (permittee may cross-reference this permit or previous reports): (R307-415-6c(5))
- I.L.1.a The identification of each term or condition of this permit that is the basis of the certification;
- I.L.1.b The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period, and

whether such methods or other means provide continuous or intermittent data. Such methods and other means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements in this permit. If necessary, the permittee also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information;

I.L.1.c

The status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the method or means designated in Provision I.L.1.b. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred; and

- I.L.1.d Such other facts as the Executive Secretary may require to determine the compliance status.
- I.L.2 The permittee shall also submit all compliance certifications to the EPA, Region VIII, at the following address or to such other address as may be required by the Executive Secretary: (R307-415-6c(5)(d))

Office of Enforcement, Compliance and Environmental Justice (mail code 8ENF)
EPA, Region VIII
999 18th Street, Suite 300
Denver, CO 80202-2466

# I.M. **Permit Shield.**

- I.M.1 Compliance with the provisions of this permit shall be deemed compliance with any applicable requirements as of the date of this permit, provided that:
- I.M.1.a Such applicable requirements are included and are specifically identified in this permit, or (R307-415-6f(1)(a))
- I.M.1.b Those requirements not applicable to the source are specifically identified and listed in this permit. (R307-415-6f(1)(b))
- I.M.2 Nothing in this permit shall alter or affect any of the following:
- I.M.2.a The emergency provisions of Utah Code Ann. Section 19-1-202 and Section 19-2-112, and the provisions of the CAA Section 303. (R307-415-6f(3)(a))
- I.M.2.b The liability of the owner or operator of the source for any violation of applicable requirements under Utah Code Ann. Section 19-2-107(2)(g) and Section 19-2-110 prior to or at the time of issuance of this permit. (R307-415-6f(3)(b)
- I.M.2.c The applicable requirements of the Acid Rain Program, consistent with the CAA Section 408(a). (R307-415-6f(3)(c))

I.M.2.d The ability of the Executive Secretary to obtain information from the source under Utah Code Ann. Section 19-2-120, and the ability of the EPA to obtain information from the source under the CAA Section 114. (R307-415-6f(3)(d))

# I.N. Emergency Provision.

- I.N.1 An "emergency" is any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. (R307-415-6g(1))
- I.N.2 An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the affirmative defense is demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
- I.N.2.a An emergency occurred and the permittee can identify the causes of the emergency. (R307-415-6g(3)(a))
- I.N.2.b The permitted facility was at the time being properly operated. (R307-415-6g(3)(b))
- I.N.2.c During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in this permit. (R307-415-6g(3)(c))
- I.N.2.d The permittee submitted notice of the emergency to the Executive Secretary within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirement of Provision I.S.2.c below. (R307-415-6g(3)(d))
- I.N.3 In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. (R307-415-6g(4))
- I.N.4 This emergency provision is in addition to any emergency or upset provision contained in any other section of this permit. (R307-415-6g(5))

### I.O. **Operational Flexibility.**

Operational flexibility is governed by R307-415-7d(1).

#### I.P. Off-permit Changes.

Off-permit changes are governed by R307-415-7d(2).

# I.Q. Administrative Permit Amendments.

Administrative permit amendments are governed by R307-415-7e.

#### I.R. **Permit Modifications.**

Permit modifications are governed by R307-415-7f.

# I.S. Records and Reporting.

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	S	1	Records
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- I.S.1.a The records of all required monitoring data and support information shall be retained by the permittee for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-charts or appropriate recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. (R307-415-6a(3)(b)(ii)
- I.S.1.b For all monitoring requirements described in Section II, Special Provisions, the source shall record the following information, where applicable: (R307-415-6a(3)(b)(i))
- I.S.1.b.1 The date, place as defined in this permit, and time of sampling or measurement.
- I.S.1.b.2 The date analyses were performed.
- I.S.1.b.3 The company or entity that performed the analyses.
- I.S.1.b.4 The analytical techniques or methods used.
- I.S.1.b.5 The results of such analyses.
- I.S.1.b.6 The operating conditions as existing at the time of sampling or measurement.
- I.S.1.c Additional record keeping requirements, if any, are described in Section II, Special Provisions.
- I.S.2 Reports.
- I.S.2.a Monitoring reports shall be submitted to the Executive Secretary every six months, or more frequently if specified in Section II. All instances of deviation from permit requirements shall be clearly identified in the reports. (R307-415-6a(3)(c)(i))
- I.S.2.b All reports submitted pursuant to Provision I.S.2.a shall be certified by a responsible official in accordance with Provision I.K of this permit. (R307-415-6a(3)(c)(i)
- I.S.2.c The Executive Secretary shall be notified promptly of any deviations from permit requirements including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventative measures taken. **Prompt, as used in this condition, shall be defined as written notification within 7 days**. Deviations from permit requirements due to unavoidable breakdowns shall be reported in accordance with the provisions of R307-107. (R307-415-6a(3)(c)(ii))

- I.S.3 Notification Addresses.
- I.S.3.a All reports, notifications, or other submissions required by this permit to be submitted to the Executive Secretary are to be sent to the following address or to such other address as may be required by the Executive Secretary:

Utah Division of Air Quality P.O. Box 144820 Salt Lake City, UT 84114-4820

Phone: 801-536-4000

I.S.3.b All reports, notifications or other submissions required by this permit to be submitted to the EPA should be sent to one of the following addresses or to such other address as may be required by the Executive Secretary:

# For annual compliance certifications

Environmental Protection Agency, Region VIII Office of Enforcement, Compliance and Environmental Justice (mail code 8ENF) 999 18th Street, Suite 300 Denver, CO 80202-2466

For reports, notifications, or other correspondence related to permit modifications, applications, etc. Environmental Protection Agency, Region VIII Office of Partnerships & Regulatory Assistance Air & Radiation Program (mail code 8P-AR) 999 18th Street, Suite 300 Denver, CO 80202-2466

Phone: 303-312-6440

# I.T. Reopening for Cause.

- I.T.1 A permit shall be reopened and revised under any of the following circumstances:
- I.T.1.a New applicable requirements become applicable to the permittee and there is a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the terms and conditions of this permit have been extended pursuant to R307-415-7c(3), application shield. (R307-415-7g(1)(a))
- I.T.1.b The Executive Secretary or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. (R307-415-7g(1)(c))
- I.T.1.c EPA or the Executive Secretary determines that this permit must be revised or revoked to assure compliance with applicable requirements. (R307-415-7g(1)(d))
- I.T.1.d Additional applicable requirements are to become effective before the renewal date of this permit and are in conflict with existing permit conditions. (R307-415-7g(1)(e))

- I.T.2 Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. (R307-415-7g(2))
- I.U. Inventory Requirements.
- I.U.1 An emission inventory shall be submitted in accordance with the procedures of R307-150, Emission Inventories. (R307-150)
- I.U.2 A Hazardous Air Pollutant Inventory shall be submitted in accordance with the procedures of R307-155, Hazardous Air Pollutant Inventory. (R307-155)

# **Section II: SPECIAL PROVISIONS**

# II.A. Emission Unit(s) Permitted to Discharge Air Contaminants.

(R307-415-4(3)(a) and R307-415-4(4))

### II.A.1 **Incineration System** (designated as INC)

Unit Description: One liquid, solid and sludge hazardous waste incinerator with a rotary kiln and afterburner. Emissions are controlled by a spray dryer, carbon injection, baghouse, saturator, and wet scrubber. Wet ESP exhausted thru main stack.

### II.A.2 **Offsite Material Management Unit** (designated as GRP)

Unit Description: Includes containers, transfer systems, tanks, and equipment components used to manage off-site material.

#### II.A.3 **Off-Site Material Containers** (designated as CNT)

Unit Description: Container means a portable unit used to hold off-site materials. Examples of containers include but are not limited to drums, dumpsters, roll-off boxes, bulk cargo containers commonly known as "portable tanks" or totes, and cargo tank trucks.

#### II.A.4 **Off-Site Material Transfer Systems** (designated as TRNS)

Unit Description: The source has various off-site material transfer systems used to convey liquids, sludges, and solids from one point to another point. These systems all consist of continuous hard piping.

# II.A.5 **Off-Site Material Tanks** (designated as TNKS)

Unit Description: This group includes sixteen liquid tanks (TNK1), two sludge tanks (TNK2), and three solid off-site material storage tanks (TNK3).

# II.A.6 **Liquid Off-Site Material Tank Farm** (designated as TNK1)

Unit Description: Sixteen 30,000 gallon tanks for liquid off-site material storage and blending. Each tank is equipped with a fixed roof. The tanks vent to either the incinerator afterburner or to a carbon canister system.

#### II.A.7 **Sludge Off-Site Material Tanks** (designated as TNK2)

Unit Description: One 5,000 gallon sludge receiving tank and one 38,000 gallon fixed-roof sludge storage tank. The storage tanks emit to the incinerator afterburner or carbon bed.

#### II.A.8 **Solid Off-Site Material Tanks** (designated as TNK3)

Unit Description: Three tanks with a capacity to store 200, 500, and 500 cubic yards of solid off-site material. These tanks are located in an enclosure which is vented to the afterburner or carbon bed.

#### II.A.9 **Diesel Tanks** (designated as TNK4)

Unit Description: One 4,000 gallon submerged diesel storage tank and two 250 gallon diesel storage tanks. No unit-specific applicable requirements.

#### II.A.10 **Fuel Oil Tank** (designated as TNK5)

Unit Description: 101,000 gallon fuel oil storage tank.

# II.A.11 **Gasoline Tank** (designated as TNK6)

Unit Description: One 4,000 gallon gasoline storage tank, equipped with a submerged fill pipe and Stage I vapor recovery equipment. No unit-specific applicable requirements.

# II.A.12 **Soda Ash Bin** (designated as SODA)

Unit Description: One soda ash bin with a baghouse.

#### II.A.13 **Cooling Tower** (designated as COOL)

Unit Description: One cooling tower. No unit-specific applicable requirements.

#### II.A.14 **Diesel Engine for Generator** (designated as GEN)

Unit Description: One diesel fired generator rated at 2,149 hp.

# II.A.15 **Diesel Engine for Water Pump** (designated as PUMP)

Unit Description: One diesel fired water pump rated at 276 hp.

## II.B. Requirements and limitations.

The following emission limitations, standards, and operational limitations apply to the permitted facility as indicated: (R307-415-6a(1))

#### II.B.1 Conditions on permitted source (Source-wide)

#### II.B.1.a Condition:

Unless otherwise specified, at all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any permitted plant equipment, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [Authority granted under R307-401-5; condition originated in DAQE-168-02]

# II.B.1.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

# II.B.1.a.2 **Recordkeeping:**

Permittee shall document activities performed to assure proper operation and maintenance. Records shall be maintained in accordance with Provision I.S.1 of this permit.

### II.B.1.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.1.b Condition:

The permittee shall comply with R307-107, Unavoidable Breakdown, of the Utah Administrative Code except all references to two hours in R307-107-2 shall be replaced with 30 minutes. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-168-02]

#### II.B.1.b.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

#### II.B.1.b.2 **Recordkeeping:**

The permittee shall keep copies of all reports required by R307-107-2 in accordance with section I.S.1 of this permit.

#### II.B.1.b.3 **Reporting:**

The permittee shall submit reports required under Section I of this permit and R307-107-2.

#### II.B.1.c Condition:

A Risk Management Plan (RMP) developed in accordance with 40 CFR Part 68 shall be submitted to the United States Environmental Protection Agency not later than the applicable date in 40 CFR 68. [Authority granted under 40 CFR 68; condition originated in 40 CFR 68]

#### II.B.1.c.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

# II.B.1.c.2 **Recordkeeping:**

A copy of the Risk Management Plan shall be available to the Executive Secretary upon request along with a copy of the transmittal letter to EPA.

# II.B.1.c.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.1.d **Condition:**

The permittee shall comply with the applicable requirements for recycling and emission reduction for class I and class II refrigerants pursuant to 40 CFR 82, Subpart F - Recycling and Emissions Reduction. [Authority granted under 40 CFR 82.150(b); condition originated in 40 CFR 82]

# II.B.1.d.1 **Monitoring:**

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 82, Subpart F.

# II.B.1.d.2 **Recordkeeping:**

All records required in 40 CFR 82, Subpart F shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

# II.B.1.d.3 **Reporting:**

All reports required in 40 CFR 82, Subpart F shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

#### II.B.1.e Condition:

The permittee shall comply with the applicable requirements for production and consumption controls for ozone-depleting substances pursuant to 40 CFR 82, Subpart A - Production and Consumption Controls. [Authority granted under 40 CFR 82 Subpart A; condition originated in 40 CFR 82]

# II.B.1.e.1 **Monitoring:**

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 82, Subpart A.

#### II.B.1.e.2 **Recordkeeping:**

All records required in 40 CFR 82, Subpart A shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

# II.B.1.e.3 **Reporting:**

All reports required in 40 CFR 82, Subpart A shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

#### II.B.1.f Condition:

- (1) Prior to accepting Group 1 wastewaters (or residuals removed from Group 1 wastewaters) from generators subject to the treatment requirements of 40 CFR 63 Subpart G, the permittee shall submit to the EPA a written certification. The certification shall state that the permittee will manage and treat such waste in accordance with the requirements of 40 CFR 63.133 through 63.147. Alternatively, the certification may state that the permittee will manage and treat the wastes in accordance with the requirements of 40 CFR 63.102(b) of subpart F, or 40 CFR 63-subpart D, if alternative emission limitations have been granted the transferor in accordance with those provisions. The permittee may revoke the written certification by sending a written statement to the EPA and the sources, giving at least 90 days notice that the permittee is rescinding acceptance of responsibility for compliance with the regulatory provisions listed in this paragraph.
- (2) By providing this written certification to the EPA, the permittee accepts responsibility for compliance with the regulatory provisions listed in paragraph (1) of this condition with respect to any shipment of wastewater or residual covered by the written certification.
- (3) Written certifications and revocation statements, to the EPA from the permittee, shall be signed by the responsible official, provide the name and address of the permittee, and be sent to the appropriate EPA Regional Office at the addresses listed in 40 CFR 63.13. Such written certifications are not transferable by the permittee. [Authority granted under 40 CFR 63.132(g); condition originated in 40 CFR 63 Subpart G]

#### II.B.1.f.1 **Monitoring:**

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 63, Subpart G.

# II.B.1.f.2 **Recordkeeping:**

All records required in 40 CFR 63, Subpart G shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

### II.B.1.f.3 **Reporting:**

All reports required in 40 CFR 63, Subpart G shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

# II.B.1.g Condition:

Sulfur content of any fuel oil combusted shall be no greater than 0.5 % by weight. [Authority granted under R307- 401- 6(1) [BACT); condition originated in DAQE-168-02]

### II.B.1.g.1 **Monitoring:**

For each delivery of oil, the permittee shall either:

- (1) Determine the fuel sulfur content expressed as wt% in accordance with the methods of the American Society for Testing Materials (ASTM);
- (2) Inspect the fuel sulfur content expressed as wt% determined by the vendor using methods of the ASTM; or
- (3) Inspect documentation provided by the vendor that indirectly demonstrates compliance with this provision.

# II.B.1.g.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

# II.B.1.g.3 Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.1.h Condition:

- (1) Prior to accepting Group 1wastewaters (or residuals removed from Group 1 wastewaters) from generators subject to the treatment requirements of 40 CFR 63 Subpart GGG, the permittee shall submit to the EPA a written certification. The certification shall state that the permittee will manage and treat such waste in accordance with the requirements of either:
  - (i) Paragraphs (b) through (i) of 40 CFR 63.1256; or
  - (ii) Subpart D of 40 CFR 63 if alternative emission limitations have been granted the transferor in accordance with those provisions; or
  - (iii) 40 CFR 63.6(g); or
  - (iv) If the affected wastewater streams or residuals removed from affected wastewater streams received by the permittee contain less than 50 ppmw of partially soluble HAP, then the permittee must, at a minimum, manage and treat the affected wastewater streams and residuals in accordance with one of the following:
    - (A) Comply with paragraph (g)(10) of 40 CFR 63.1256 and cover the waste management units up to the activated sludge unit; or
    - (B) Comply with paragraphs (g)(11)(i), (ii), and (h) of 40 CFR 63.1256 and cover the waste management units up to the activated sludge unit; or
    - (C) Comply with paragraph (g)(10) of 40 CFR 63.1256 provided that the permittee of demonstrates that less than 5 percent of the total soluble HAP is emitted from waste management units up to the activated sludge unit; or
    - (D) Comply with paragraphs (g)(11)(i), (ii), and (h) of 40 CFR 63.1256 provided that the permittee demonstrates that less than 5 percent of the total soluble HAP is emitted from waste management units up to the activated sludge unit.
- (2) By providing this written certification to the EPA, the permittee accepts responsibility for compliance with the regulatory provisions listed in paragraph (1) of this condition

with respect to any shipment of wastewater or residual covered by the written certification.

- (3) The permittee may revoke the written certification by sending a written statement to the EPA and to the generators, giving at least 90 days notice that the permittee is rescinding acceptance of responsibility for compliance with the regulatory provisions listed in this condition.
- (4) Written certifications and revocation statements, to the EPA from the permittee shall be signed by the responsible official, provide the name and address of the permittee, and be sent to the appropriate EPA Regional Office at the addresses listed in 40 CFR 63.13. Such written certifications are not transferable by the permittee. [Authority granted under 40 CFR 63.1256(a)(5); condition originated in 40 CFR 63 Subpart GGG]

# II.B.1.h.1 **Monitoring:**

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 63, Subpart GGG.

# II.B.1.h.2 **Recordkeeping:**

All records required in 40 CFR 63, Subpart GGG shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

# II.B.1.h.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.1.i Condition:

- (1) Prior to accepting Group 1 wastewaters (or residuals removed from Group 1 wastewaters) from generators subject to the treatment requirements of 40 CFR 63 Subpart U, the permittee shall submit to the EPA a written certification. The certification shall state that the permittee will manage and treat such waste in accordance with the requirements of 40 CFR 63.132 through 63.147 with differences identified in 40 CFR 63.501. The permittee may revoke the written certification by sending a written statement to the EPA and to the generators, giving at least 90 days notice that the permittee is rescinding acceptance of responsibility for compliance with the regulatory provisions listed in this paragraph.
- (2) By providing this written certification to the EPA, the permittee accepts responsibility for compliance with the regulatory provisions listed in paragraph (1) of this condition with respect to any shipment of wastewater or residual covered by the written certification.
- (3) Written certifications and revocation statements to the EPA from the permittee, shall be signed by the responsible official, provide the name and address of the permittee, and be sent to the appropriate EPA Regional Office at the addresses listed in 40 CFR 63.13. Such written certifications are not transferable by the permittee [Authority granted under 40 CFR 63.501(a) and 63.132(g); condition originated in 40 CFR 63 Subpart U and Subpart G]

# II.B.1.i.1 Monitoring:

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 63, Subpart U.

# II.B.1.i.2 **Recordkeeping:**

All records required in 40 CFR 63, Subpart U shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

# II.B.1.i.3 **Reporting:**

All reports required in 40 CFR 63, Subpart U shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

# II.B.1.j Condition:

- (1) Prior to accepting Group 1 wastewaters (or residuals removed from Group 1 wastewaters) from generators subject to the treatment requirements of 40 CFR 63 Subpart XX, the permittee shall submit to the EPA a written certification. The certification shall state that the permittee will manage and treat such waste in accordance with the requirements of 40 CFR Subpart XX. The permittee may revoke the written certification by sending a written statement to the EPA and to the generators, giving at least 90 days notice that the permittee is rescinding acceptance of responsibility for compliance with the regulatory provisions listed in this paragraph.
- (2) By providing this written certification to the EPA, the permittee accepts responsibility for compliance with the regulatory provisions in 40 CFR 63 Subpart XX with respect to any shipment of waste covered by the written certification.
- (3) Written certifications and revocation statements to the EPA from the permittee shall be signed by the responsible official, provide the name and address of the permittee, and be sent to the appropriate EPA Regional Office at the addresses listed in 40 CFR 63.13. Such written certifications are not transferable by the permittee. [Authority granted under 40 CFR 63.1096; condition originated in 40 CFR 63 Subpart XX]

# II.B.1.j.1 Monitoring:

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 63, Subpart XX.

# II.B.1.j.2 **Recordkeeping:**

All records required in 40 CFR 63, Subpart XX shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

#### II.B.1.j.3 **Reporting:**

All reports required in 40 CFR 63, Subpart XX shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

#### II.B.1.k Condition:

- (1) Prior to accepting Group 1 wastewaters (or residuals removed from Group 1 wastewaters) from generators subject to the treatment requirements of 40 CFR 63 Subpart YY, the permittee shall submit to the EPA a written certification. The certification shall state that the permittee will manage and treat such waste in accordance with the requirements of 40 CFR 63.132 through 63.147 with differences identified in 40 CFR 63.1106(a). The permittee may revoke the written certification by sending a written statement to the EPA and to the generators, giving at least 90 days notice that the permittee is rescinding acceptance of responsibility for compliance with the regulatory provisions listed in this paragraph.
- (2) By providing this written certification to the EPA, the permittee accepts responsibility for compliance with the regulatory provisions listed in paragraph (1) of this condition with respect to any shipment of wastewater or residual covered by the written certification.
- (3) Written certifications and revocation statements to the EPA from the permittee shall be signed by the responsible official, provide the name and address of the permittee, and be sent to the appropriate EPA Regional Office at the addresses listed in 40 CFR 63.13. Such written certifications are not transferable by the permittee. [Authority granted under 40 CFR 63.1106(a) and 63.132(g); condition originated in 40 CFR 63 Subpart YY and Subpart G]

# II.B.1.k.1 **Monitoring:**

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 63, Subpart YY.

#### II.B.1.k.2 **Recordkeeping:**

All records required in 40 CFR 63, Subpart YY shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

#### II.B.1.k.3 **Reporting:**

All reports required in 40 CFR 63, Subpart YY shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

# II.B.1.1 Condition:

- (1) Prior to accepting Group 1 wastewaters (or residuals removed from Group 1 wastewaters) from generators subject to the treatment requirements of 40 CFR 63 Subpart JJJ, the permittee shall submit to the EPA a written certification. The certification shall state that the permittee will manage and treat such waste in accordance with the requirements of 40 CFR 63.132 through 63.147 with differences identified in 40 CFR 63.1330(a). The permittee may revoke the written certification by sending a written statement to the EPA and to the generators, giving at least 90 days notice that the permittee is rescinding acceptance of responsibility for compliance with the regulatory provisions listed in this paragraph.
- (2) By providing this written certification to the EPA, the permittee accepts responsibility for compliance with the regulatory provisions listed in paragraph (1) of this condition

with respect to any shipment of wastewater or residual covered by the written certification.

(3) Written certifications and revocation statements to the EPA from the permittee shall be signed by the responsible official, provide the name and address of the permittee, and be sent to the appropriate EPA Regional Office at the addresses listed in 40 CFR 63.13. Such written certifications are not transferable by the permittee. [Authority granted under 40 CFR 63.1330(b)(21)-(22) and 63.132(g); condition originated in 40 CFR 63 Subpart JJJ and Subpart G]

# II.B.1.1.1 Monitoring:

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 63, Subpart JJJ.

# II.B.1.1.2 **Recordkeeping:**

All records required in 40 CFR 63, Subpart JJJ shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

# II.B.1.1.3 Reporting:

All reports required in 40 CFR 63, Subpart JJJ shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

#### II.B.1.m **Condition:**

- (1) Prior to accepting Group 1 wastewaters (or residuals removed from Group 1 wastewaters) from generators subject to the treatment requirements of 40 CFR 63 Subpart MMM, the permittee shall submit to the EPA a written certification. The certification shall state that the permittee will manage and treat such waste in accordance with the requirements of 40 CFR 63.132 through 63.147 with differences identified in 40 CFR 63.1362(d). The permittee may revoke the written certification by sending a written statement to the EPA and to the generators, giving at least 90 days notice that the permittee is rescinding acceptance of responsibility for compliance with the regulatory provisions listed in this paragraph.
- (2) By providing this written certification to the EPA, the permittee accepts responsibility for compliance with the regulatory provisions listed in paragraph (1) of this condition with respect to any shipment of wastewater or residual covered by the written certification.
- (3) Written certifications and revocation statements to the EPA from the permittee shall be signed by the responsible official, provide the name and address of the permittee, and be sent to the appropriate EPA Regional Office at the addresses listed in 40 CFR 63.13. Such written certifications are not transferable by the permittee. [Authority granted under 40 CFR 63.1362(d) and 63.132(g); condition originated in 40 CFR 63 Subpart MMM and Subpart G]

#### II.B.1.m.1 **Monitoring:**

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 63, Subpart MMM.

# II.B.1.m.2 **Recordkeeping:**

All records required in 40 CFR 63, Subpart MMM shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

# II.B.1.m.3 **Reporting:**

All reports required in 40 CFR 63, Subpart MMM shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

### II.B.1.n **Condition:**

- (1) Prior to accepting Group 1 wastewaters (or residuals removed from Group 1 wastewaters) from generators subject to the treatment requirements of 40 CFR 63 Subpart PPP, the permittee shall submit to the EPA a written certification. The certification shall state that the permittee will manage and treat such waste in accordance with the requirements of 40 CFR 63.132 through 63.147 with differences identified in 40 CFR 63.1433(a). The permittee may revoke the written certification by sending a written statement to the EPA and to the generators, giving at least 90 days notice that the permittee is rescinding acceptance of responsibility for compliance with the regulatory provisions listed in this paragraph.
- (2) By providing this written certification to the EPA, the permittee accepts responsibility for compliance with the regulatory provisions listed in paragraph (1) of this condition with respect to any shipment of wastewater or residual covered by the written certification.
- (3) Written certifications and revocation statements, to the EPA from the permittee shall be signed by the responsible official, provide the name and address of the permittee, and be sent to the appropriate EPA Regional Office at the addresses listed in 40 CFR 63.13. Such written certifications are not transferable by the permittee. [Authority granted under 40 CFR 63.1433(a) and 63.132(g); condition originated in 40 CFR 63 Subpart PPP and Subpart G]

# II.B.1.n.1 **Monitoring:**

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 63, Subpart PPP.

# II.B.1.n.2 **Recordkeeping:**

All records required in 40 CFR 63, Subpart PPP shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

# II.B.1.n.3 **Reporting:**

All reports required in 40 CFR 63, Subpart PPP shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

#### II.B.1.0 **Condition:**

(1) Prior to accepting Group 1 wastewaters (or residuals removed from Group 1 wastewaters) from generators subject to the treatment requirements of 40 CFR 63 Subpart UUUU, the permittee shall submit to the EPA a written certification. The certification shall state that the permittee will manage and treat such waste in accordance with the

requirements of 40 CFR 63.132 through 63.140. The permittee may revoke the written certification by sending a written statement to the EPA and to the generators, giving at least 90 days notice that the permittee is rescinding acceptance of responsibility for compliance with the regulatory provisions listed in this paragraph.

- (2) By providing this written certification to the EPA, the permittee accepts responsibility for compliance with the regulatory provisions listed in paragraph (1) of this condition with respect to any shipment of wastewater or residual covered by the written certification.
- (3) Written certifications and revocation statements to the EPA from the permittee shall be signed by the responsible official, provide the name and address of the permittee, and be sent to the appropriate EPA Regional Office at the addresses listed in 40 CFR 63.13. Such written certifications are not transferable by the permittee. [Authority granted under 40 CFR 63.5610 (Table 1, item 8) and 63.132(g); condition originated in 40 CFR 63 Subpart UUUU and Subpart G]

# II.B.1.o.1 **Monitoring:**

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 63, Subpart UUUU.

### II.B.1.o.2 **Recordkeeping:**

All records required in 40 CFR 63, Subpart UUUU shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

### II.B.1.o.3 **Reporting:**

All reports required in 40 CFR 63, Subpart UUUU shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

# II.B.2 Conditions on Incineration System (INC)

#### II.B.2.a **Condition:**

Emissions of Dioxin/Furan Toxic Equivalents: 2,3,7,8-Tetrachlorodibenzo-p-dioxin shall be no greater than 0.4 ng TEQ/dscm @ 7% O<sub>2</sub>. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-168-02]

#### II.B.2.a.1 **Monitoring:**

Stack testing shall be conducted as follows:

- (a) Frequency. A trial burn or performance test shall be conducted at least every two years.
- (b) Notification. At least 30 days prior to conducting a stack test, the permittee shall notify the Executive Secretary of the date, time, and place of testing. A copy of the test protocol shall be provided with the notification. The permittee and tester shall attend a pretest conference at least 30 days prior to the test if determined necessary by the Executive Secretary.

#### (c) Methods

- (1) Sample location. The emissions point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1.
- (2) Pollutant concentration. EPA Publication SW-846, Method 0023A shall be used to determine pollutant concentrations.
- (3) Oxygen concentrations from the CEMS required by this permit shall be used to correct the pollutant concentrations to  $7\% O_2$ .
- (4) Toxic equivalency factors as required by 40 CFR 63 Subpart EEE shall be used to convert pollutant concentrations to toxic equivalent concentrations.
- (d) Test Condition. Testing shall be conducted under conditions as required during a RCRA performance test or trial burn, or 40 CFR 63 Subpart EEE comprehensive performance test.

# II.B.2.a.2 Recordkeeping:

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit and the above required testing methods.

# II.B.2.a.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 90 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.2.b Condition:

Emissions of Mercury Compounds shall be no greater than 1,762 ? g/dscm @ 7%O<sub>2</sub>. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-168-02]

#### II.B.2.b.1 **Monitoring:**

Stack testing shall be conducted as follows:

- (a) Frequency. A trial burn or performance test shall be conducted at least every two years.
- (b) Notification. At least 30 days prior to conducting a stack test, the permittee shall notify the Executive Secretary of the date, time, and place of testing. A copy of the test protocol shall be provided with the notification. The permittee and tester shall attend a pretest conference at least 30 days prior to the test if determined necessary by the Executive Secretary.

#### (c) Methods

(1) Sample location. The emissions point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1.

- (2) Pollutant concentrations. 40 CFR 60, Appendix A, Method 29 or EPA Publication SW-846, Method 0060 shall be used to determine pollutant concentrations.
- (3) Oxygen concentrations from the CEMS required by this permit shall be used to correct the pollutant concentrations to 7% O<sub>2</sub>.
- (d) Test Condition. Testing shall be conducted under conditions as required during a RCRA performance test or trial burn, or 40 CFR 63 Subpart EEE comprehensive performance test.

### II.B.2.b.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit and the above required testing methods.

### II.B.2.b.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 90 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.2.c Condition:

Combined emissions of lead and cadmium shall not exceed 240  $?g/dscm @ 7\%O_2$ . [Authority granted under R307- 401- 6(1) [BACT]; condition originated in DAQE-168-02]

### II.B.2.c.1 **Monitoring:**

Stack testing shall be conducted as follows:

- (a) Frequency. A trial burn or performance test shall be conducted at least every two years.
- (b) Notification. At least 30 days prior to conducting a stack test, the permittee shall notify the Executive Secretary of the date, time, and place of testing. A copy of the test protocol shall be provided with the notification. The permittee and tester shall attend a pretest conference at least 30 days prior to the test if determined necessary by the Executive Secretary.

#### (c) Methods

- (1) Sample location. The emissions point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1.
- (2) Pollutant concentrations. 40 CFR 60, Appendix A, Method 29 or EPA Publication SW-846, Method 0060 shall be used to determine pollutant concentrations.
- (3) Oxygen concentrations from the CEMS required by this permit shall be used to correct the pollutant concentrations to 7% O<sub>2</sub>.
- (d) Test Condition. Testing shall be conducted under conditions as required during a RCRA performance test or trial burn, or 40 CFR 63 Subpart EEE comprehensive performance test.

### II.B.2.c.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit and the above required testing methods.

### II.B.2.c.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 90 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.2.d Condition:

Combined emissions of arsenic, beryllium, and chromium shall not exceed 97 ?g/dscm @ 7%O<sub>2</sub>. [Authority granted under R307- 401- 6(1) [BACT]; condition originated in DAQE-168-02]

#### II.B.2.d.1 **Monitoring:**

Stack testing shall be conducted as follows:

- (a) Frequency. A trial burn or performance test shall be conducted at least every two years.
- (b) Notification. At least 30 days prior to conducting a stack test, the permittee shall notify the Executive Secretary of the date, time, and place of testing. A copy of the test protocol shall be provided with the notification. The permittee and tester shall attend a pretest conference at least 30 days prior to the test if determined necessary by the Executive Secretary.

#### (c) Methods

- (1) Sample location. The emissions point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1.
- (2) Pollutant concentrations. 40 CFR 60, Appendix A, Method 29 or EPA Publication SW-846, Method 0060 shall be used to determine pollutant concentrations.
- (3) Oxygen concentrations from the CEMS required by this permit shall be used to correct the pollutant concentrations to 7% O<sub>2</sub>.
- (d) Test Condition. Testing shall be conducted under conditions as required during a RCRA performance test or trial burn, or 40 CFR 63 Subpart EEE comprehensive performance test.

# II.B.2.d.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit and the above required testing methods.

#### II.B.2.d.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 90 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no

additional reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.2.e Condition:

Emissions of Beryllium Compounds shall be no greater than 10 grams over any 24 hour period. [Authority granted under 40 CFR 61.32(a); condition originated in DAQE-168-02]

### II.B.2.e.1 **Monitoring:**

Stack testing shall be conducted as follows:

- (a) Frequency. A stack test shall be conducted at least every two years.
- (b) Notification. At least 30 days prior to conducting a stack test, the permittee shall notify the Executive Secretary of the date, time, and place of testing. A copy of the test protocol shall be provided with the notification. The permittee and tester shall attend a pretest conference at least 30 days prior to the test if determined necessary by the Executive Secretary.
- (c) Methods. The pollutant emission rate in g/day shall be monitored in accordance with 40 CFR 61, Appendix B, Method 103 or 104.
- (d) Calculations. The permittee shall calculate the pollutant emission rate in g/day in accordance with the selected method. Where emissions depend upon the relative frequency of operation of different types of processes, operating hours, operating capacities, or other factors, the calculation of maximum 24-hour-period emissions will be based on that combination of factors which is likely to occur during the subject period and which result in the maximum emissions.
- (e) Test Condition. Samples shall be taken over such a period or periods as are necessary to accurately determine the maximum emissions which will occur in any 24-hour period. No changes in the operation shall be made, which would potentially increase emissions above that determined by the most recent source test, until a new emission level has been estimated by calculation and the results reported to the Executive Secretary.

#### II.B.2.e.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit and the above required testing methods.

#### II.B.2.e.3 **Reporting:**

All samples shall be analyzed and beryllium emissions shall be determined within 30 days after the test. All determinations shall be reported to the Executive Secretary by a registered letter dispatched before the close of the next business day following such determination. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.2.f Condition:

Emissions of Mercury Compounds shall be no greater than 3,200 grams over any 24 hour period when incinerating wastewater treatment plant sludge. [Authority granted under 40 CFR 61.52(b); condition originated in 40 CFR 61.52(b)]

#### II.B.2.f.1 **Monitoring:**

The permittee shall monitor mercury emissions using the following procedure.

- (a) Frequency. At least once every five years, when sludge produced by a treatment plant that processes municipal or industrial waste water is incinerated, the permittee shall monitor mercury emissions in accordance with this condition. If mercury emissions exceed 1.6 kg per 24-hour period, the permittee shall monitor mercury emissions at intervals of at least once per year, when sludge produced by a treatment plant that processes municipal or industrial waste water is incinerated.
- (b) The Executive Secretary shall be notified at least 30 days prior to a sludge sampling test, so that he may at his option observe the test.
- (c) Sludge produced by a treatment plant that processes municipal or industrial waste waters shall be sampled according to paragraph (c)(1) of this section, sludge charging rate for the plant shall be determined according to paragraph (c)(2) of this section, and the sludge analysis shall be performed according to paragraph (c)(3) of this section.
  - (1) The sludge shall be sampled according to 40 CFR 61, Appendix B, Method 105-Determination of Mercury in Wastewater Treatment Plant Sewage Sludges. A total of three composite samples shall be obtained within an operating period of 24 hours. When the 24-hour operating period is not continuous, the total sampling period shall not exceed 72 hours after the first grab sample is obtained. Samples shall not be exposed to any condition that may result in mercury contamination or loss.
  - (2) The maximum 24-hour period sludge incineration rate shall be determined by use of a flow rate measurement device that can measure the mass rate of sludge charged to the incinerator with an accuracy of  $\pm 5$  percent over its operating range.
  - (3) The sampling, handling, preparation, and analysis of sludge samples shall be accomplished according to Method 105 in Appendix B of 40 CFR 61.
- (d) The mercury emissions shall be determined by use of the following equation.

EHg = MQFsm(avg)/1000

where:

EHg=Mercury emissions, g/day.

M=Mercury concentration of sludge on a dry solids basis, μg/g.

Q=Sludge changing rate, kg/day.

Fsm=Weight fraction of solids in the collected sludge after mixing.

1000=Conversion factor, kg µg/g<sup>2</sup>.

(e) No changes in the operation of the plant, when incinerating sludge produced by a treatment plant that processes municipal or industrial waste waters, shall be made after a sludge test has been conducted which would potentially increase emissions above the level determined by the most recent sludge test, until the new emission level has been estimated by calculation and the results reported to the Executive Secretary.

# II.B.2.f.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

### II.B.2.f.3 **Reporting:**

All sludge samples shall be analyzed for mercury content within 30 days after the sludge sample is collected. Each determination shall be reported to the Executive Secretary by a registered letter dispatched within 15 calendar days following the date such determination is completed. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

## II.B.2.g Condition:

Emissions of Nickel Compounds shall be no greater than 5,090 ?g/dscm @ 7%O<sub>2</sub>. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-168-02]

### II.B.2.g.1 **Monitoring:**

Stack testing shall be conducted as follows:

- (a) Frequency. A trial burn or performance test shall be conducted at least every two years.
- (b) Notification. At least 30 days prior to conducting a stack test, the permittee shall notify the Executive Secretary of the date, time, and place of testing. A copy of the test protocol shall be provided with the notification. The permittee and tester shall attend a pretest conference at least 30 days prior to the test if determined necessary by the Executive Secretary.

#### (c) Methods

- (1) Sample location. The emissions point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1.
- (2) Pollutant concentrations. 40 CFR 60, Appendix A, Method 29 or EPA Publication SW-846, Method 0060 shall be used to determine pollutant concentrations.
- (3) Oxygen concentrations from the CEMS required by this permit shall be used to correct the pollutant concentrations to 7% O<sub>2</sub>.
- (d) Test Condition. Testing shall be conducted under conditions as required during a RCRA performance test or trial burn, or 40 CFR 63 Subpart EEE comprehensive performance test.

# II.B.2.g.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit and the above required testing methods.

# II.B.2.g.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 90 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.2.h Condition:

Combined emissions of hydrochloric acid and chlorine gas shall not exceed 77 ?g/dscm @ 7%O<sub>2</sub>. [Authority granted under R307- 401- 6(1) [BACT]; condition originated in DAQE-168-02]

### II.B.2.h.1 **Monitoring:**

Stack testing shall be conducted as follows:

- (a) Frequency. A trial burn or performance test shall be conducted at least every two years.
- (b) Notification. At least 30 days prior to conducting a stack test, the permittee shall notify the Executive Secretary of the date, time, and place of testing. A copy of the test protocol shall be provided with the notification. The permittee and tester shall attend a pretest conference at least 30 days prior to the test if determined necessary by the Executive Secretary.

#### (c) Methods

- (1) Sample location. The emissions point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1.
- (2) Pollutant concentrations. 40 CFR 60, Appendix A, Methods 26A, 320 or 321 or EPA Publication SW-846, Method 0050 shall be used to determine pollutant concentrations.
- (3) Oxygen concentrations from the CEMS required by this permit shall be used to correct the pollutant concentrations to  $7\% O_2$ .
- (d) Test Condition. Testing shall be conducted under conditions as required during a RCRA performance test or trial burn, or 40 CFR 63 Subpart EEE comprehensive performance test.

#### II.B.2.h.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit and the above required testing methods.

#### II.B.2.h.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 90 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.2.i Condition:

Emissions of Chlorine shall be no greater than 8.5 ppmdv @ 7% O<sub>2</sub>. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-168-02]

#### II.B.2.i.1 **Monitoring:**

Stack testing shall be conducted as follows:

- (a) Frequency. A trial burn or performance test shall be conducted at least every two years.
- (b) Notification. At least 30 days prior to conducting a stack test, the permittee shall notify the Executive Secretary of the date, time, and place of testing. A copy of the test protocol shall be provided with the notification. The permittee and tester shall attend a pretest conference at least 30 days prior to the test if determined necessary by the Executive Secretary.

#### (c) Methods

- (1) Sample location. The emissions point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1.
- (2) Pollutant concentrations. 40 CFR 60, Appendix A, Methods 26A, 320 or 321 or EPA Publication SW-846, Method 0050 shall be used to determine pollutant concentrations.
- (3) Oxygen concentrations from the CEMS required by this permit shall be used to correct the pollutant concentrations to  $7\% O_2$ .
- (d) Test Condition. Testing shall be conducted under conditions as required during a RCRA performance test or trial burn, or 40 CFR 63 Subpart EEE comprehensive performance test.

## II.B.2.i.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit and the above required testing methods.

#### II.B.2.i.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 90 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

# II.B.2.j Condition:

Emissions of TSP shall be no greater than 34 mg/dscm @ 7%O<sub>2</sub>. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-168-02]

#### II.B.2.j.1 **Monitoring:**

Stack testing shall be conducted as follows:

- (a) Frequency. A trial burn or performance test shall be conducted at least every two years.
- (b) Notification. At least 30 days prior to conducting a stack test, the permittee shall notify the Executive Secretary of the date, time, and place of testing. A copy of the test protocol shall be provided with the notification. The permittee and tester shall attend a pretest conference at least 30 days prior to the test if determined necessary by the Executive Secretary.

#### (c) Methods

- (1) Sample location. The emissions point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1.
- (2) Pollutant concentrations. 40 CFR 60, Appendix A, 5 or 5I shall be used to determine pollutant concentrations.
- (3) Oxygen concentrations from the CEMS required by this permit shall be used to correct the pollutant concentrations to  $7\% O_2$ .
- (d) Test Condition. Testing shall be conducted under conditions as required during a RCRA performance test or trial burn, or 40 CFR 63 Subpart EEE comprehensive performance test.

# II.B.2.j.2 Recordkeeping:

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit and the above required testing methods.

# II.B.2.j.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 90 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.2.k Condition:

Emissions of CO shall be no greater than 100 ppmdv @ 7% O<sub>2</sub> over an hourly rolling average. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-168-02].

CO concentrations not meeting the above requirements, shall be addressed by the Compliance Plan and Schedule found in Section V of this permit. [Authority granted under R307-415-6c(3); Condition originated in Title V Application as amended June 12, 2003].

#### II.B.2.k.1 **Monitoring:**

The permittee shall install, calibrate, operate and maintain a continuous emission monitoring system (CEMS) in accordance with R307-170 for the subject pollutant and oxygen. The CEMS oxygen data shall be used to correct the pollutant concentration to 7% oxygen.

#### II.B.2.k.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit. The permittee shall also maintain records as required by R307-170-8 except that these records will be retained for 5 years as required by Provision I.S.1 of this permit.

### II.B.2.k.3 **Reporting:**

#### (a) General

The permittee shall comply with the reporting provisions in R307-170-7(5), R307-170-9 and Section I of this permit. For the purposes of I.S.2.c of this permit, prompt for this condition shall be defined as written notification by January 30, April 30, July 30, and October 30 for any deviations which occurred during the quarter which ended 30 days earlier.

(b) Certified Progress Reports. [Authority granted under R307-415-6c(4); Condition originated in Title V Application as amended June 12, 2003]

The permittee shall also submit certified progress reports every month until all specified milestones in Section V of this permit have been completed. The certified progress reports shall contain the following information:

- (1) Dates for achieving the activities, milestones, or compliance required in Section V and dates when such activities, milestones or compliance were achieved; and
- (2) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

The first certified progress report will be due one month from the date that this permit is issued.

## II.B.2.1 Condition:

Emissions of THC shall be no greater than 10 ppmdv @ 7% O<sub>2</sub> over an hourly rolling average reported as propane. Limit applies during the destruction and removal efficiency (DRE) test runs only. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-168-02]

#### II.B.2.1.1 **Monitoring:**

The permittee shall install, calibrate, operate and maintain a continuous emission monitoring system (CEMS) in accordance with R307-170 for the subject pollutant and oxygen. Monitoring is only required during the DRE test runs. The CEMS oxygen data shall be used to correct the pollutant concentration to 7% oxygen.

#### II.B.2.1.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit. The permittee shall also maintain records as required by R307-170-

8 except that these records will be retained for 5 years as required by Provision I.S.1 of this permit.

# II.B.2.1.3 **Reporting:**

The permittee shall comply with the reporting provisions in R307-170-7(5), R307-170-9 and Section I of this permit. For the purposes of I.S.2.c of this permit, prompt for this condition shall be defined as written notification by January 30, April 30, July 30, and October 30 for any deviations which occurred during the quarter which ended 30 days earlier.

#### II.B.2.m Condition:

Emissions of  $NO_x$  shall be no greater than 28.5 lbs/hr averaged over 24 hours. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-168-02]

### II.B.2.m.1 **Monitoring:**

The permittee shall install, calibrate, operate, and maintain a continuous emissions monitoring system (CEM) in accordance with R 307-170. While the affected emission unit is operating, hourly  $NO_x$  emission rates expressed in lbs per hour shall be determined in accordance with R307-170 using the appropriate conversion factors. The applicable performance specification in R307-170 shall be 40 CFR 60, Appendix B, Performance Specification 6 - "Specifications and Test Procedures for Continuous Emission Rate Monitoring Systems in Stationary Sources". The permittee shall use the hourly  $NO_x$  emission rates to compute 24-hour rolling averages.

### II.B.2.m.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit. The permittee shall also maintain records as required by R307-170-8 except that these records will be retained for 5 years as required by Provision I.S.1 of this permit.

#### II.B.2.m.3 **Reporting:**

The permittee shall comply with the reporting provisions in R307-170-7(5), R307-170-9 and Section I of this permit. For the purposes of I.S.2.c of this permit, prompt for this condition shall be defined as written notification by January 30, April 30, July 30, and October 30 for any deviations which occurred during the quarter which ended 30 days earlier.

#### II.B.2.n Condition:

Emissions of SO<sub>2</sub> shall be no greater than 91 ppmdv @ 7% O<sub>2</sub>. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-168-02]

# II.B.2.n.1 **Monitoring:**

Monitoring shall be conducted as follows:

- (I) Stack Testing:
- (a) Frequency. A trial burn or performance test shall be conducted at least every two years.

(b) Notification. At least 30 days prior to conducting a stack test, the permittee shall notify the Executive Secretary of the date, time, and place of testing. A copy of the test protocol shall be provided with the notification. The permittee and tester shall attend a pretest conference at least 30 days prior to the test if determined necessary by the Executive Secretary.

#### (c) Methods

- (1) Sample location. The emissions point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1.
- (2) Pollutant concentrations. 40 CFR 60, Appendix A, Method 6, 6A, 6B or 6C shall be used to determine pollutant concentrations.
- (3) Oxygen concentrations from the CEMS required by this permit shall be used to correct the pollutant concentrations to 7% O<sub>2</sub>.
- (d) Test Condition. Testing shall be conducted under conditions as required during a RCRA performance test or trial burn, or 40 CFR 63 Subpart EEE comprehensive performance test.
- (II) Continuous Emission Monitoring:

During each time period when used oil is fed to the affected emission unit, the permittee shall monitor  $SO_2$  and  $O_2$  emissions using a continuous emission monitoring system (CEMS) installed, calibrated, operated and maintained in accordance with R307-170. The pollutant concentration shall be corrected to 7% oxygen using data from the oxygen CEMS.

#### **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit. The permittee shall also maintain records as required by R307-170-8 except that these records will be retained for 5 years as required by Provision I.S.1 of this permit. Additionally, the permittee shall also record the start and end date and time of each time period that used oil is fed to the affected emission unit.

#### II.B.2.n.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 90 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. The permittee shall also comply with the reporting provisions in R307-170-7(5), R307-170-9 and Section I of this permit. For the purposes of I.S.2.c of this permit, prompt for this condition shall be defined as written notification by January 30, April 30, July 30, and October 30 for any deviations which occurred during the quarter which ended 30 days earlier.

#### II.B.2.0 **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-168-02]

#### II.B.2.n.2

### II.B.2.o.1 **Monitoring:**

An opacity determination shall be conducted once in each quarter that the affected emission unit is operated. The opacity determination shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9.

# II.B.2.o.2 **Recordkeeping:**

Results from opacity observations and all data required by 40 CFR 60, Appendix A, Method 9 shall be recorded and maintained in accordance with Provision I.S.1 of this permit.

### II.B.2.o.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.2.p Condition:

- (1) 99.99% DRE. Except as provided in paragraph (2) of this condition, the permittee shall achieve a destruction and removal efficiency (DRE) of 99.99% for each principle organic hazardous constituent (POHC) designated in accordance with paragraph (c)(3) of 40 CFR 63.1203.
- (2) 99.9999% DRE. If the permittee burns the dioxin-listed hazardous wastes FO2O, FO21, FO22, FO23, FO26, or FO27 (see 40 CFR 261.31), the permittee shall achieve a DRE of 99.9999% for each POHC designated in accordance with paragraph (c)(3) of 40 CFR 63.1203. The permittee shall demonstrate this DRE performance on POHCs that are more difficult to incinerate than tetra-, penta-, and hexachlorodibenzo-p-dioxins and dibenzofurans. The permittee shall notify the Executive Secretary of the permittee's intent to incinerate hazardous wastes FO2O, FO21, FO22, FO23, FO26, or FO27. [Authority granted under R307- 401-6(1) [BACT]; condition originated in DAQE-168-02]

#### II.B.2.p.1 **Monitoring:**

The DRE of each POHC shall be determined as follows:

- (a) Frequency. A trial burn or performance test shall be conducted at least every two years.
- (b) Notification. At least 30 days prior to conducting a stack test, the permittee shall notify the Executive Secretary of the date, time, and place of testing. A copy of the test protocol shall be provided with the notification. The permittee and tester shall attend a pretest conference at least 30 days prior to the test if determined necessary by the Executive Secretary.

#### (c) Methods

- (1) Stack sample location. The emissions point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1.
- (2) Stack volumetric flow rate. 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate at the POHC concentration measurement location.

- (3) POHC emission concentration. EPA Publication SW-846, Method 0010 or 0030 shall be used to determine POHC concentrations.
- (4) Feedstream flow rates. The flow rate of each feed stream which contains POHCs shall be monitored using a continuous monitoring system in accordance with this permit.
- (5) Feedstream POHC analytical methods. The permittee may use any reliable analytical method to determine feedstream concentrations of each POHC present in each feedstream. It is the permittee's responsibility to ensure that the sampling and analysis procedures are unbiased, precise, and that the results are representative of the feedstream. For each feedstream, the permittee shall demonstrate that:
  - (i) Each analyte is not present above the reported level at the 80% upper confidence limit around the mean; and
  - (ii) The analysis could have detected the presence of the constituent at or below the reported level at the 80% upper confidence limit around the mean. (See Guidance for Data Quality Assessment—Practical Methods for Data Analysis, EPA QA/G-9, January 1998, EPA/600/R-96/084).
- (d) Calculations. The mass emission rate of each POHC shall be determined as the product of the POHC concentration and the stack gas volumetric flow rate. The feed rate of each POHC shall be determined as the sum of the product of the POHC concentration and feedstream flow rate for each feedstream. The DRE shall be determine using the following equation for each POHC for each run.

 $DRE = [1-(Wout / Win)] \times 100\%$ 

Where:

Win = mass feedrate of one POHC in the feedstreams; and

Wout = mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere.

(e) Test Condition. Testing shall be conducted under conditions as required during a RCRA performance test or trial burn, or 40 CFR 63 Subpart EEE comprehensive performance test.

#### II.B.2.p.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit and the above required testing methods.

#### II.B.2.p.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 90 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

### II.B.2.q Condition:

Hours of operation while waste material is incinerated shall be no greater than 7,900 per 12 month rolling period. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-168-02]

#### II.B.2.q.1 **Monitoring:**

By the 15th day of each month, the permittee shall calculate the total hours of operation in the previous 12 months for the affected emission unit. Records of hours of operation shall be kept for all periods when the plant is in operation. The hours of operation shall be determined by the supervisor monitoring and maintaining an operations log.

#### II.B.2.q.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

#### II.B.2.q.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.2.r Condition:

Combined waste feed rate shall be no greater than 35,175 lbs/hr over an hourly rolling average during each HW incineration period as defined in this permit. [Authority granted under R307- 401- 6(1) [BACT]; condition originated in DAQE-168-02]

#### II.B.2.r.1 **Monitoring:**

- (a) Method. The permittee shall install and operate a continuous monitoring system (CMS) that complies at a minimum with the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system.
  - (i) Determine and record the mass or volume flowrate of each feedstream by a CMS. For feedstream flowrates determined by volume, the permittee shall determine and record the density of the feedstream by sampling and analysis; and
  - (ii) Calculate and record the mass feedrate of the parameter as specified in (b).
- (b) Frequency. The CMS shall sample the regulated parameter without interruption during each HW incineration period, and evaluate the detector response at least once each 15 seconds, and compute and record the average values at least every 60 seconds.

The HW incineration period is the period extending from the time when HW feed to the affected emission unit starts until the HW residence time has transpired. The HW residence time means the time elapsed from cutoff of the flow of HW into the affected emission unit (including, for example, the time required for liquids to flow from the cutoff valve into the affected emission unit) until solid, liquid, and gaseous materials from the HW, excluding residues that may adhere to combustion chamber surfaces, exit all combustion chambers at the affected emission unit. If the affected emission unit has multiple firing systems whereby the HW residence time may vary for the firing systems, the HW residence time for purposes of complying with this subpart means the longest HW residence time for any firing system in use at the affected emission unit at the time of HW cutoff.

- (c) The span of the CMS detector shall not be exceeded.
- (d) Calculation of rolling averages.
  - (i) Calculation of rolling averages upon intermittent operations. The permittee shall ignore periods of time when one-minute values are not available for calculating rolling averages. When one-minute values become available again, the first one-minute value is added to the previous one-minute values to calculate rolling averages.
  - (ii) Calculation of rolling averages when the hazardous waste feed is cutoff. Calculation of hourly rolling averages may cease upon expiration of the hazardous waste residence time. Calculation of hourly rolling averages will restart when hazardous waste feed begins after expiration of the hazardous waste residence time.
- (e) Operating parameter limit changes. The permittee shall submit to the Executive Secretary an application for a significant permit modification with the proposed limits for the operating parameter with the results of each RCRA trial burn and 40 CFR 63 Subpart EEE comprehensive performance test. In the application, the hourly rolling average of the total waste feed rate to the incinerator, including both the primary and secondary chambers, shall not exceed the average of the test run average waste feed rates during a RCRA trial burn or 40 CFR 63 Subpart EEE comprehensive performance test that demonstrated compliance with the DRE and emission standards of this permit.

#### II.B.2.r.2 **Recordkeeping:**

For each HW incineration period at each affected emission unit, the permittee shall record the following information: the time and date HW feed started; time and date HW feed stopped; time and date the HW residence time transpired; and the name of each firing system used. The permittee shall also record the calculated HW residence time for each firing system at each affected emission unit and documentation supporting these calculations. These records and all other records required by section I.S.1 of this permit shall be maintained in accordance with section LS.1.

#### II.B.2.r.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit. For the purposes of I.S.2.c of this permit, prompt for this condition shall be defined as written notification by January 30, April 30, July 30, and October 30 for any deviations which occurred during the quarter which ended 30 days earlier.

#### II.B.2.s **Condition:**

Primary chamber temperature shall be no less than 1,815 degrees F on an hourly rolling average during each HW incineration period as defined in this permit. [Authority granted under R307- 401- 6(1) [BACT]; condition originated in DAQE-168-02]

Primary chamber temperatures not meeting the above requirements shall be addressed by the Compliance Plan and Schedule found in Section V of this permit. [Authority granted under R307-415-6c(3); Condition originated in Title V Application as amended June 12, 2003].

## II.B.2.s.1 **Monitoring:**

- (a) Method. The permittee shall install and operate a continuous monitoring system (CMS) that complies at a minimum with the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system. The temperature shall be the average temperature readings of the North and South infrared pyrometers. Alternatively when it is necessary to take one of the infrared pyrometers off-line and use only the reading from either the North or South infrared pyrometer, the temperature of the combustion gas at the kiln exit shall not be less than 1940 F on an hourly rolling average basis. The permittee shall document in the operating record those periods when only one infrared pyrometer is on-line.
- (b) Calibration. The permittee shall operate and maintain the pyrometers in accordance with manufacturer specifications unless otherwise approved by the Executive Secretary. The permittee shall calibrate pyrometers in accordance with the frequency and procedures recommended by the manufacturer, but no less frequent than once per year, unless otherwise approved by the Executive Secretary.
- (c) Frequency. The CMS shall sample the regulated parameter without interruption during each HW incineration period as defined in this permit, and evaluate the detector response at least once each 15 seconds, and compute and record the average values at least every 60 seconds.
- (d) The span of the CMS detector shall not be exceeded.
- (e) Calculation of rolling averages.
- (i) Calculation of rolling averages upon intermittent operations. The permittee shall ignore periods of time when one-minute values are not available for calculating rolling averages. When one-minute values become available again, the first one-minute value is added to the previous one-minute values to calculate rolling averages.
- (ii) Calculation of rolling averages when the hazardous waste feed is cutoff. Calculation of hourly rolling averages may cease upon expiration of the hazardous waste residence time. Calculation of hourly rolling averages will restart when hazardous waste feed begins after expiration of the hazardous waste residence time.
- (f) Operating parameter limit changes. The permittee shall submit to the Executive Secretary an application for a significant permit modification with the proposed limits for the operating parameter with the results of each RCRA trial burn and 40 CFR 63 Subpart EEE comprehensive performance test. In the application, the hourly rolling average of the chamber gas temperature shall be greater than or equal to the average of the test run average temperatures during a RCRA trial burn or 40 CFR 63 Subpart EEE comprehensive performance test that demonstrated compliance with the DRE and dioxin/furan emission standards of this permit.

### II.B.2.s.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

#### II.B.2.s.3 **Reporting:**

(a) General

The permittee shall comply with the reporting provisions specified in Section I of this permit. For the purposes of I.S.2.c of this permit, prompt for this condition shall be defined as written notification by January 30, April 30, July 30, and October 30 for any deviations which occurred during the quarter which ended 30 days earlier.

(b) Certified Progress Reports. [Authority granted under R307-415-6c(4); Condition originated in Title V Application as amended June 12, 2003]

The permittee shall also submit certified progress reports every month until all specified milestones in Section V of this permit have been completed. The certified project reports shall contain the following information:

- (1) Dates for achieving the activities, milestones, or compliance required in Section V and dates when such activities, milestones or compliance were achieved; and
- (2) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

The first certified progress report will be due one month from the date that this permit is issued.

#### II.B.2.t Condition:

Secondary chamber temperature shall be no less than 2,018 degrees F on an hourly rolling average during each HW incineration period as defined in this permit. [Authority granted under R307- 401- 6(1) [BACT]; condition originated in DAQE-168-02]

Secondary chamber temperatures not meeting the above requirements shall be addressed by the Compliance Plan and Schedule found in Section V of this permit. [Authority granted under R307-415-6c(3); Condition originated in Title V Application as amended June 12, 2003].

#### II.B.2.t.1 **Monitoring:**

(a) Method. The permittee shall install and operate a continuous monitoring system (CMS) that complies at a minimum with the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system. The temperature shall be measured at a location that best represents, as practicable, the bulk gas temperature in the combustion zone

- (b) Calibration. The calibration of thermocouples shall be verified at a frequency and in a manner consistent with manufacturer specifications, but no less frequent than once per year. When using optical pyrometers, the permittee shall operate and maintain the optical pyrometers in accordance with manufacturer specifications unless otherwise approved by the Executive Secretary. The permittee shall calibrate optical pyrometers in accordance with the frequency and procedures recommended by the manufacturer, but no less frequent than once per year, unless otherwise approved by the Executive Secretary.
- (c) Frequency. The CMS shall sample the regulated parameter without interruption during each HW incineration period as defined in this permit, and evaluate the detector response at least once each 15 seconds, and compute and record the average values at least every 60 seconds.
- (d) The span of the CMS detector shall not be exceeded.
- (e) Calculation of rolling averages.
  - (i) Calculation of rolling averages upon intermittent operations. The permittee shall ignore periods of time when one-minute values are not available for calculating rolling averages. When one-minute values become available again, the first one-minute value is added to the previous one-minute values to calculate rolling averages.
  - (ii) Calculation of rolling averages when the hazardous waste feed is cutoff. Calculation of hourly rolling averages may cease upon expiration of the hazardous waste residence time. Calculation of hourly rolling averages will restart when hazardous waste feed begins after expiration of the hazardous waste residence time.
- (f) Operating parameter limit changes. The permittee shall submit to the Executive Secretary an application for a significant permit modification with the proposed limits for the operating parameter with the results of each RCRA trial burn and 40 CFR 63 Subpart EEE comprehensive performance test. In the application, the hourly rolling average of the chamber gas temperature shall be greater than or equal to the average of the test run average temperatures during a RCRA trial burn or 40 CFR 63 Subpart EEE comprehensive performance test that demonstrated compliance with the DRE and dioxin/furan emission standards of this permit.

#### II.B.2.t.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

#### II.B.2.t.3 **Reporting:**

(a) General

The permittee shall comply with the reporting provisions specified in Section I of this permit. For the purposes of I.S.2.c of this permit, prompt for this condition shall be defined as written notification by January 30, April 30, July 30, and October 30 for any deviations which occurred during the quarter which ended 30 days earlier.

(b) Certified Progress Reports. [Authority granted under R307-415-6c(4); Condition originated in Title V Application as amended June 12, 2003]

The permittee shall also submit certified progress reports every month until all specified milestones in Section V of this permit have been completed. The certified project reports shall contain the following information:

- (1) Dates for achieving the activities, milestones, or compliance required in Section V and dates when such activities, milestones or compliance were achieved; and
- (2) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

The first certified progress report will be due one month from the date that this permit is issued.

#### II.B.2.u Condition:

Baghouse inlet temperature shall be no greater than 388 degrees F on an hourly rolling average during each HW incineration period as defined in this permit. [Authority granted under R307- 401- 6(1) [BACT]; condition originated in DAQE-168-02]

Baghouse inlet temperatures not meeting the above requirements shall be addressed by the Compliance Plan and Schedule found in Section V of this permit. [Authority granted under R307-415-6c(3); Condition originated in Title V Application as amended June 12, 2003].

#### II.B.2.u.1 **Monitoring:**

- (a) Method. The permittee shall install and operate a continuous monitoring system (CMS) that complies at a minimum with the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system. The CMS shall monitor the exhaust gas temperature at the inlet to the baghouse.
- (b) Calibration. The calibration of thermocouples shall be verified at a frequency and in a manner consistent with manufacturer specifications, but no less frequent than once per year.
- (c) Frequency. The CMS shall sample the regulated parameter without interruption during each HW incineration period as defined in this permit, and evaluate the detector response at least once each 15 seconds, and compute and record the average values at least every 60 seconds.
- (d) The span of the CMS detector shall not be exceeded.
- (e) Calculation of rolling averages.
  - (i) Calculation of rolling averages upon intermittent operations. The permittee shall ignore periods of time when one-minute values are not

available for calculating rolling averages. When one-minute values become available again, the first one-minute value is added to the previous one-minute values to calculate rolling averages.

- (ii) Calculation of rolling averages when the hazardous waste feed is cutoff. Calculation of hourly rolling averages may cease upon expiration of the hazardous waste residence time. Calculation of hourly rolling averages will restart when hazardous waste feed begins after expiration of the hazardous waste residence time.
- (f) Operating parameter limit changes. The permittee shall submit to the Executive Secretary an application for a significant permit modification with the proposed limits for the operating parameter with the results of each RCRA trial burn and 40 CFR 63 Subpart EEE comprehensive performance test. In the application, except as provided in this condition, the hourly rolling average of the gas temperature at the inlet to the baghouse shall not exceed the lower of the following: (i) 400 F, or (ii) the average of the test run average temperatures during a RCRA trial burn or 40 CFR 63 Subpart EEE comprehensive performance test that demonstrated compliance with the dioxin/furan and metals emission standards of this permit. Prior to the September 30, 2004 (i.e., extended compliance date of 40 CFR 63 Subpart EEE), the permittee may operate at a higher temperature than demonstrated during a RCRA trial burn but not to exceed 400 F if the Executive Secretary approves.

#### II.B.2.u.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

#### II.B.2.u.3 **Reporting:**

(a) General

The permittee shall comply with the reporting provisions specified in Section I of this permit. For the purposes of I.S.2.c of this permit, prompt for this condition shall be defined as written notification by January 30, April 30, July 30, and October 30 for any deviations which occurred during the quarter which ended 30 days earlier.

(b) Certified Progress Reports. [Authority granted under R307-415-6c(4); Condition originated in Title V Application as amended June 12, 2003]

The permittee shall also submit certified progress reports every month until all specified milestones in Section V of this permit have been completed. The certified project reports shall contain the following information:

- (1) Dates for achieving the activities, milestones, or compliance required in Section V and dates when such activities, milestones or compliance were achieved; and
- (2) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

The first certified progress report will be due one month from the date that this permit is issued.

#### II.B.2.v Condition:

On and after September 30, 2003, the hourly rolling average of the feed rate of activated carbon at each feed location shall be greater than or equal to the average of the test run averages during a RCRA trial burn or 40 CFR 63 Subpart EEE comprehensive performance test that demonstrated compliance with the dioxin/furan and mercury limit of this permit for the affected emission unit. [Authority granted under R307- 401- 6(1) [BACT); condition originated in DAQE-168-02]

#### II.B.2.v.1 **Monitoring:**

- (a) Method. On and after September 30, 2003, the permittee shall install and operate a continuous monitoring system (CMS) that complies at a minimum with the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system.
- (b) Calibration. The weight measurement device for carbon injection must be  $\pm 1$  percent of the weight being measured. The calibration of the device must be verified at least once every three months when the carbon injection system is used.
- (c) Frequency. The CMS shall sample the regulated parameter without interruption during each HW incineration period as defined in this permit, and evaluate the detector response at least once each 15 seconds, and compute and record the average values at least every 60 seconds when the carbon injection system is used.
- (d) The span of the CMS detector shall not be exceeded.
- (e) Calculation of rolling averages.
  - (i) Calculation of rolling averages upon intermittent operations. The permittee shall ignore periods of time when one-minute values are not available for calculating rolling averages. When one-minute values become available again, the first one-minute value is added to the previous one-minute values to calculate rolling averages.
  - (ii) Calculation of rolling averages when the hazardous waste feed is cutoff. Calculation of hourly rolling averages may cease upon expiration of the hazardous waste residence time. Calculation of hourly rolling averages will restart when hazardous waste feed begins after expiration of the hazardous waste residence time.
- (f) Operating parameter limit changes. The permittee shall submit to the Executive Secretary an application for a significant permit modification with the proposed limits for the operating parameter with the results of each RCRA trial burn and 40 CFR 63 Subpart EEE comprehensive performance test. In the application, except as provided in this condition, the hourly rolling average of the feed rate of activated carbon at each feed location shall be greater than or equal to the average of the test run averages during a RCRA trial burn or 40 CFR

63 Subpart EEE comprehensive performance test that demonstrated compliance with the dioxin/furan and mercury limit of this permit. Prior to September 30, 2003 (i.e., compliance date of 40 CFR 63 Subpart EEE), the permittee may operate at a lower activated carbon feed rate than demonstrated during a RCRA trial burn if the Executive Secretary approves.

#### II.B.2.v.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

#### II.B.2.v.3 **Reporting:**

The permittee shall comply with the reporting provisions specified in Section I of this permit. For the purposes of I.S.2.c of this permit, prompt for this condition shall be defined as written notification by January 30, April 30, July 30, and October 30 for any deviations which occurred during the quarter which ended 30 days earlier.

#### II.B.2.w Condition:

Stack gas flow rate shall be no greater than 44,100 dscf per minute over an hourly rolling average during each HW incineration period as defined in this permit. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-168-02]

#### II.B.2.w.1 **Monitoring:**

- (a) Method. The permittee shall install and operate a continuous monitoring system (CMS) that complies at a minimum with the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system. The CMS shall measure the stack gas volumetric flow rate.
- (b) Calibration. The calibration of stack volumetric flow system shall be verified at a frequency and in a manner consistent with manufacturer specifications, but no less frequent than once per year.
- (c) Frequency. CMS shall sample the regulated parameter without interruption during each HW incineration period as defined in this permit, and evaluate the detector response at least once each 15 seconds, and compute and record the average values at least every 60 seconds.
- (d) The span of the CMS detector shall not be exceeded.
- (e) Calculation of rolling averages.
  - (i) Calculation of rolling averages upon intermittent operations. The permittee shall ignore periods of time when one-minute values are not available for calculating rolling averages. When one-minute values become available again, the first one-minute value is added to the previous one-minute values to calculate rolling averages.

- (ii) Calculation of rolling averages when the hazardous waste feed is cutoff. Calculation of hourly rolling averages may cease upon expiration of the hazardous waste residence time. Calculation of hourly rolling averages will restart when hazardous waste feed begins after expiration of the hazardous waste residence time.
- (f) Operating parameter limit changes. The permittee shall submit to the Executive Secretary an application for a significant permit modification with the proposed limits for the operating parameter with the results of each RCRA trial burn and 40 CFR 63 Subpart EEE comprehensive performance test.

#### II.B.2.w.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

#### II.B.2.w.3 **Reporting:**

(a) General

The permittee shall comply with the reporting provisions specified in Section I of this permit. For the purposes of I.S.2.c of this permit, prompt for this condition shall be defined as written notification by January 30, April 30, July 30, and October 30 for any deviations which occurred during the quarter which ended 30 days earlier.

(b) Certified Progress Reports. [Authority granted under R307-415-6c(4); Condition originated in Title V Application as amended June 12, 2003]

The permittee shall also submit certified progress reports every month until all specified milestones in Section V of this permit have been completed. The certified project reports shall contain the following information:

- (1) Dates for achieving the activities, milestones, or compliance required in Section V and dates when such activities, milestones or compliance were achieved; and
- (2) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

The first certified progress report will be due one month from the date that this permit is issued.

#### II.B.2.x Condition:

If the emergency safety vent (ESV) opens when hazardous waste remains in the combustion chamber (i.e., when the hazardous waste residence time has not expired) during an event other than a malfunction as defined in the startup, shutdown, and malfunction plan such that combustion gases are not treated as during the most recent trial burn or 40 CFR 63 Subpart EEE comprehensive performance test (e.g., if the combustion gas bypasses any emission control device that was operating during the trial

burn or 40 CFR 63 Subpart EEE comprehensive performance test), the permittee shall document in the operating record whether the incinerator emissions remained in compliance with the emission standards of this permit during the ESV opening event.

#### (i) ESV operating plan.

- (A) The permittee shall develop an ESV operating plan, comply with the operating plan, and keep the plan in the operating record. Operating record means documentation retained at the source for ready inspection by authorized officials of all information required by this permit to document and maintain compliance with the requirements of this permit, including data and information, reports, notifications, and communications with the Executive Secretary.
- (B) The ESV operating plan shall provide detailed procedures for rapidly stopping the waste feed, shutting down the combustor, and maintaining temperature and negative pressure in the combustion chamber during the hazardous waste residence time, if feasible. The plan shall include calculations and information and data documenting the effectiveness of the plan's procedures for ensuring that combustion chamber temperature and negative pressure are maintained as is reasonably feasible.

#### (ii) Corrective measures.

After any ESV opening that results in a failure to meet the emission standards of this permit, the permittee shall investigate the cause of the ESV opening, take appropriate corrective measures to minimize such future ESV openings.

[Authority granted under R307- 401- 6(1) [BACT]; condition originated in DAQE-168-02]

#### II.B.2.x.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

#### II.B.2.x.2 **Recordkeeping:**

The permittee shall maintain records in accordance with provision I.S.1 of this permit. The permittee shall also maintain records of the findings and corrective measures of any investigation required by this condition.

#### II.B.2.x.3 **Reporting:**

The permittee shall comply with the reporting requirements in section I of this permit. Additionally, the permittee shall submit to the Executive Secretary a written report within 5 days of an ESV opening that results in failure to meet the emission standards of this permit for the affected emission unit. The report shall document the result of the investigation and corrective measures taken.

#### II.B.2.y Condition:

For the Carbon Injection System: If a continuous program of construction, installation, modification, relocation or establishment is not proceeding eighteen months after the issuance date of the subject approval order, the Executive Secretary may revoke the

subject approval order. [Authority granted under R307-401-11; condition originated in DAQE-168-02]

#### II.B.2.y.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

# II.B.2.y.2 **Recordkeeping:**

As applicable, the permittee shall maintain a copy of each notification required by this permit condition in accordance with Provision I.S.1 of this permit.

#### II.B.2.y.3 **Reporting:**

In addition to the reporting requirements specified in Section I of this permit, the permittee shall notify the Executive Secretary in writing eighteen months after the issuance date of the subject approval order if construction, installation, modification, relocation or establishment is not complete. The notification shall document the status of construction, installation, modification, relocation or establishment and provide a schedule for installation, modification, relocation or establishment. The permittee shall also notify the Executive Secretary in writing when the affected process unit is operational.

#### II.B.2.z **Condition:**

The permittee shall comply with all applicable requirements of 40 CFR 63 Subpart EEE including but not limited to the standards for hazardous waste incinerators in 40 CFR 63.1203(a, c and d) and operating requirements in 40 CFR 63.1206(c). The permittee must comply with the standards of 40 CFR 63 Subpart EEE no later than September 30, 2004 per extension granted by the Executive Secretary, as specified in 40 CFR 63.1206(a)(1). The operating requirements specified in the Notification of Compliance will be incorporated in this permit.

The permittee shall also comply with all applicable requirements of 40 CFR 63 Subpart A as given in Table 1 of 40 CFR 63 Subpart EEE. [Authority granted under 40 CFR 63 Subpart EEE and DAQH-0749-02; condition originated in DAQE-168-02]

#### II.B.2.z.1 **Monitoring:**

The permittee shall comply with all applicable performance testing and monitoring requirements of 40 CFR 63 Subparts A and EEE including but not limited to those given in 40 CFR 63.1207 through 1209.

#### II.B.2.z.2 **Recordkeeping:**

The permittee shall comply with all applicable record keeping requirements of 40 CFR 63 Subparts A and EEE including but not limited to those given in 40 CFR 63.1211. These records and results of monitoring shall be maintained as described in Provision I.S.1 of this permit.

#### II.B.2.z.3 **Reporting:**

The permittee shall comply with the reporting requirements in Section I of this permit and any additional reporting and notification requirements of 40 CFR 63 Subparts A and EEE, as applicable, including but not limited to those given in 40 CFR 63.1210 and 1211.

#### II.B.2.aa Condition:

- (i) The Permittee shall implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the affected emission unit during periods of startup, shutdown, and malfunction; a program of corrective action for malfunctioning processes; and air pollution control and monitoring equipment used to comply with the standards for the affected emission unit.
- (ii) During periods of startup, shutdown, and malfunction, the Permittee shall operate and maintain the affected emission unit (including associated air pollution control and monitoring equipment) in accordance with the procedures specified in the startup, shutdown, and malfunction plan developed under paragraph (i) of this condition.
- (iii) The Permittee shall maintain at the affected emission unit a current startup, shutdown, and malfunction plan and shall make the plan available upon request for inspection and copying by the Executive Secretary. In addition, if the startup, shutdown, and malfunction plan is subsequently revised as provided in paragraph (v) of this condition, the Permittee shall maintain at the affected emission unit each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and shall make each such previous version available for inspection and copying by the Executive Secretary for a period of 5 years after revision of the plan. If at any time after adoption of a startup, shutdown, and malfunction plan the affected emission unit ceases operation or is otherwise no longer subject to the provisions of 40 CFR 63, the Permittee shall retain a copy of the most recent plan for 5 years from the date the affected emission unit ceases operation or is no longer subject to 40 CFR 63 and shall make the plan available upon request for inspection and copying by the Executive Secretary.
- (iv) To satisfy the requirements of this section to develop a startup, shutdown, and malfunction plan, the Permittee may use the affected emission unit's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of this section and are made available for inspection when requested by the Executive Secretary.
- (v) The Permittee may periodically revise the startup, shutdown, and malfunction plan for the affected emission unit as necessary to satisfy the requirements of 40 CFR 63 or to reflect changes in equipment or procedures at the affected emission unit. However, each such revision to a startup, shutdown, and malfunction plan shall be reported in the semiannual report required by reporting. If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the Permittee developed the plan, the Permittee shall revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the affected emission unit during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that the Permittee makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the affected emission unit which are deemed to be a startup, shutdown, malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under 40 CFR 63, the revised plan shall not take effect until after the Permittee has provided a written notice describing the revision to the permitting authority.

(vi) Any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by 40 CFR 63 shall not be deemed to constitute permit revisions under this permit. Moreover, none of the procedures specified by the startup, shutdown, and malfunction plan for an affected emission unit shall be deemed to fall within the permit shield provision in this permit. [Authority granted under R307-401-6(1) (BACT), and 40 CFR 63.6(e)(3); condition originated in DAQE-168-02, and 40 CFR 63.6(e)(3)]

#### II.B.2.aa.1

#### **Monitoring:**

Records required for this permit condition will serve as monitoring.

#### II.B.2.aa.2

#### **Recordkeeping:**

The permittee shall maintain the following records in accordance with section I.S.1 of this permit:

- (i) The occurrence and duration of each startup, shutdown, or malfunction of the operation;
- (ii) The occurrence and duration of each malfunction of the required air pollution control and monitoring equipment;
- (iii) All required maintenance performed on the air pollution control and monitoring equipment;
- (iv) Actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when such actions are different from the procedures specified in the startup, shutdown, and malfunction plan;
- (v) All information necessary to demonstrate conformance with the affected emission unit's startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. (The information needed to demonstrate conformance with the startup, shutdown, and malfunction plan may be recorded using a "checklist," or some other effective form of recordkeeping, in order to minimize the recordkeeping burden for conforming events); and
- (vi) Each period during which a CMS is malfunctioning or inoperative (including out-of-control periods).

#### II.B.2.aa.3

#### **Reporting:**

The permittee shall comply with the reporting requirements in Section I of this permit. In addition, the permittee shall comply with the following reporting requirements.

- (i) If actions taken by the permittee during a startup, shutdown, or malfunction of the affected emission unit (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown, and malfunction plan, the permittee shall state such information in a startup, shutdown, and malfunction report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period, and they must include the number, duration, and a brief description of each startup, shutdown, or malfunction. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the permittee or other responsible official who is certifying its accuracy, that shall be submitted to the Executive Secretary semiannually. The startup, shutdown, and malfunction report shall be delivered or postmarked by the 30th day following the end of each calendar half.
- (ii) Immediate startup, shutdown, and malfunction reports. Any time an action taken by the permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the affected emission unit's startup, shutdown, and malfunction plan, the permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event. The immediate report required under this paragraph shall consist of a telephone call (or facsimile [FAX] transmission) to the Executive Secretary within 2 working days after commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event, that contains the name, title, and signature of the permittee or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.

#### II.B.3 Conditions on Offsite Material Management Unit (GRP)

#### II.B.3.a **Condition:**

- (1) Operation and maintenance requirements.
  - (i) At all times, including periods of startup, shutdown, and malfunction, the Permittee shall operate and maintain the affected emission unit, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions to the levels required by this permit, i.e., meet the emission standard or comply with the startup, shutdown, and malfunction plan. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in paragraph (2) of this section), review of operation and maintenance records, and inspection of the source.
  - (ii) Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan required in

paragraph (2) of this section. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, the Permittee shall comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.

- (2) Startup, Shutdown, and Malfunction Plan.
  - (i) The Permittee shall implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the affected emission unit during periods of startup, shutdown, and malfunction; a program of corrective action for malfunctioning process; and air pollution control and monitoring equipment used to comply with this condition.
  - (ii) During periods of startup, shutdown, and malfunction, the Permittee shall operate and maintain the affected emission unit (including associated air pollution control and monitoring equipment) in accordance with the procedures specified in the startup, shutdown, and malfunction plan developed under paragraph (2)(i) of this section.
  - (iii) The Permittee shall maintain at the affected emission unit a current startup, shutdown, and malfunction plan and shall make the plan available upon request for inspection and copying by the Executive Secretary. In addition, if the startup, shutdown, and malfunction plan is subsequently revised as provided in paragraph (2)(v) of this section, the Permittee shall maintain at the affected emission unit each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and shall make each such previous version available for inspection and copying by the Executive Secretary for a period of 5 years after revision of the plan. If at any time after adoption of a startup, shutdown, and malfunction plan the affected emission unit ceases operation or is otherwise no longer subject to the provisions of 40 CFR 63, the Permittee shall retain a copy of the most recent plan for 5 years from the date the source ceases operation or is no longer subject to 40 CFR 63 and shall make the plan available upon request for inspection and copying by the Executive Secretary.
  - (iv) To satisfy the requirements of this section to develop a startup, shutdown, and malfunction plan, the Permittee may use the affected emission unit's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of this section and are made available for inspection when requested by the Executive Secretary.
  - (v) The Permittee may periodically revise the startup, shutdown, and malfunction plan for the affected emission unit as necessary to satisfy the requirements of 40 CFR 63 or to reflect changes in equipment or procedures at the affected emission unit. The Permittee may make such revisions to the startup, shutdown, and malfunction plan without prior approval by the permitting authority. However, each such revision to a startup, shutdown, and malfunction plan shall be reported in the semiannual report required under reporting. If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the Permittee developed the plan, the Permittee

shall revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the affected emission unit during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that the Permittee makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the affected emission unit which are deemed to be a startup, shutdown, malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under 40 CFR 63, the revised plan shall not take effect until after the Permittee has provided a written notice describing the revision to the permitting authority.

(vi) Any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by 40 CFR 63 shall not be deemed to constitute permit revisions under this permit. Moreover, none of the procedures specified by the startup, shutdown, and malfunction plan for an affected emission unit shall be deemed to fall within the permit shield provision in this permit. [Authority granted under 40 CFR 63 Subpart A; condition originated in DAQE-168-021

### **Monitoring:**

Records required for this permit condition will serve as monitoring.

#### **Recordkeeping:**

The permittee shall comply with the following recordkeeping requirements:

- (a) General recordkeeping requirements.
  - (1) The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63 recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.
  - (2) The Permittee shall maintain relevant records of—
    - (i) The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);
    - (ii) The occurrence and duration of each malfunction of the required air pollution control and monitoring equipment;
    - (iii) Actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when such actions are different from the procedures specified in the affected emission unit's startup, shutdown, and malfunction plan;

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(iv) All information necessary to demonstrate conformance with the affected emission unit's startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. (The information needed to demonstrate conformance with the startup, shutdown, and malfunction plan may be recorded using a "checklist," or some other effective form of recordkeeping, in order to minimize the recordkeeping burden for conforming events):

#### II.B.3.a.3 **Reporting:**

The permittee shall comply with the reporting requirements in Section I of this permit. In addition, the permittee shall comply with the following reporting requirements.

- (a) Applicability and general information. The Permittee shall send a copy of each report submitted to the Executive Secretary to Region 8 of the EPA to the address given in Section I of this permit.
- (b) General reporting requirements.
  - (i) Periodic startup, shutdown, and malfunction reports. If actions taken by the Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan, the Permittee shall state such information in a startup, shutdown, and malfunction report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period, and they shall include the number, duration, and a brief description of each startup, shutdown, or malfunction. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the Permittee or other responsible official who is certifying its accuracy, that shall be submitted to the Executive Secretary semiannually (or on a more frequent basis if specified otherwise in this condition). The startup, shutdown, and malfunction report shall be delivered or postmarked by the 30th day following the end of each calendar half (or other calendar reporting period, as appropriate).
  - (ii) Immediate startup, shutdown, and malfunction reports. Any time an action taken by the Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the affected emission unit's startup, shutdown, and malfunction plan, the Permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event. The immediate report required under this paragraph shall consist of a telephone call (or facsimile [FAX] transmission) to the Executive Secretary within 2 working days after

commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event, that contains the name, title, and signature of the Permittee or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.

#### II.B.3.b Condition: 40 CFR Part 63, Subpart DD

#### (I) Affected Equipment

- Equipment leaks. This condition applies to all equipment components in the Permittee's facility that meet the following three criteria.
  - (1) The equipment component is a pump, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, or instrumentation system;
  - (2) The equipment component contains or contacts off-site material having a total HAP concentration equal to or greater than 10 percent by weight; and
  - (3) The equipment component is intended to operate for 300 hours or more during a calendar year in off-site material service.

#### (II) Standards: General.

- (a) The Permittee shall demonstrate compliance with the requirements of sections III through IX of this condition as required in 40 CFR 61.05, except as provided in sections X and XI of this condition.
- (b) Compliance with this condition will be determined by review of records, review of performance test results, and inspection using the methods and procedures specified in monitoring.
- (c) Each piece of equipment to which this condition applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment.

#### (III) Standards: Pumps.

(a)

- (1) Each pump shall be monitored monthly to detect leaks by the methods specified in paragraph (a) of monitoring.
- (2) Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

(b)

- (1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- (2) If there are indications of liquids dripping from the pump seal, a leak is detected.

(c)

- (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in section IX of this condition.
- (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

#### (IV) Standards: Pressure relief devices in gas/vapor service.

(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in paragraph (b) of monitoring.

(b)

- (1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in section IX of this condition.
- (2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in paragraph (b) of monitoring.

#### (V) Standards: Sampling connecting systems.

(a) In-situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) 40 CFR 61.242-5.

#### (VI) Standards: Open-ended valves or lines.

(a)

- (1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve.
- (2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.
- (b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
- (c) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) at all other times.
- (d) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs (a) through (c) of this section are exempt from the requirements of paragraphs (a) through (c) of this section.

#### (VII) Standards: Valves.

- (a) Each valve shall be monitored monthly to detect leaks by the method specified in paragraph (a) of monitoring and shall comply with paragraphs (b)-(e), except as provided in paragraphs (f) and (g) of this section, and sections X and XI of this condition.
- (b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)

- (1) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.
- (2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

(d)

(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in section IX of this condition.

- (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (e) First attempts at repair include, but are not limited to, the following best practices where practicable:
  - (1) Tightening of bonnet bolts;
  - (2) Replacement of bonnet bolts;
  - (3) Tightening of packing gland nuts; and
  - (4) Injection of lubricant into lubricated packing.
- (f) Any valve that is designated, as described in paragraph (d)(1) of Section II of recordkeeping, as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) if:
  - (1) The Permittee of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a); and
  - (2) The Permittee of the valve has a written plan that requires monitoring of the valve as frequent as practicable during safe-to-monitor times.
- (g) Any valve that is designated, as described in paragraph (d)(2) of section II of recordkeeping, as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) if:
  - (1) The Permittee of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface;
  - (2) The process unit within which the valve is located is an existing process unit; and
  - (3) The Permittee of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

#### (VIII) Standards: Pressure relief services in liquid service and connectors.

- (a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pressure relief devices in liquid service and connectors, the Permittee shall follow either one of the following procedures:
  - (1) The Permittee shall monitor the equipment within 5 days by the method specified in paragraph (a) of monitoring and shall comply with the requirements of paragraphs (b) through (d) of this section.
  - (2) The Permittee shall eliminate the visual, audible, olfactory, or other indication of a potential leak.
- (b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- (c)
- (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in section IX of this condition.
- (2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (d) First attempts at repair include, but are not limited to, the best practices described under paragraph (e) of section VII of this condition.

### (IX) Standards: Delay of repair.

(a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.

- (b) Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the process and that does not remain in VHAP service.
- (c) Delay of repair for valves will be allowed if:
  - (1) The Permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and
  - (2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 61.242-11.
- (d) Delay of repair for pumps will be allowed if:
  - (1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and
  - (2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.
- (e) Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

# (X) Alternative standards for valves in VHAP service— allowable percentage of valves leaking.

- (a) The Permittee may elect to have all valves within a process unit comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.
- (b) The following requirements shall be met if the Permittee decides to comply with an allowable percentage of valves leaking:
  - (1) The Permittee shall notify the Executive Secretary that the Permittee has elected to have all valves within a process unit to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in paragraph (c) Section II of reporting.
  - (2) A performance test as specified in paragraph (c) of this section shall be conducted initially upon designation, annually, and at other times requested by the Executive Secretary.
  - (3) If a valve leak is detected, it shall be repaired in accordance with paragraphs (d) and (e) of section VII of this condition.
- (c) Performance tests shall be conducted in the following manner:
  - (1) All valves in VHAP service within the process unit shall be monitored within 1 week by the methods specified in paragraph (a) of monitoring.
  - (2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
  - (3) The leak percentage shall be determined by dividing the number of valves in VHAP service for which leaks are detected by the number of valves in VHAP service within the process unit.
- (d) If the Permittee elects to have all valves comply with this alternative standard, the Permittee shall not have a process unit with a leak percentage greater than 2.0 percent.
- (e) If the Permittee decides no longer to comply with section X of this condition, the Permittee shall notify the Executive Secretary in writing that the work practice standard described in paragraphs (a)-(e) of section VII of this condition will be followed.

# (XI) Alternative standards for valves in VHAP service—skip period leak detection and repair.

(a)

- (1) The Permittee may elect for all valves within a process unit to comply with one of the alternative work practices specified in paragraphs (b)(2) and (3) of this section.
- (2) The Permittee shall notify the Executive Secretary before implementing one of the alternative work practices, as specified in paragraph (c) of section II of reporting.

(b)

- (1) The Permittee shall comply initially with the requirements for valves, as described in section VII of this condition.
- (2) After 2 consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2.0, the Permittee may begin to skip one of the quarterly leak detection periods for the valves in VHAP service.
- (3) After five consecutive quarterly leak detection periods (or two consecutive quarterly leak detection samples followed by 3 consecutive semiannual leak detection samples) with the percentage of valves leaking equal to or less than 2.0, the Permittee may begin to skip three of the quarterly leak detection periods for the valves in VHAP service.
- (4) If the percentage of valves leaking is greater than 2.0, the Permittee shall comply with the requirements as described in section VII of this condition but may again elect to use this section.

[Authority granted under 40 CFR 63.691; condition originated in DAQE-168-02]

#### II.B.3.b.1

#### **Monitoring:**

- (a) Monitoring shall comply with the following requirements:
  - (1) Monitoring shall comply with Method 21 of Appendix A of 40 CFR part 60.
  - (2) The detection instrument shall meet the performance criteria of Method 21.
  - (3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21.
  - (4) Calibration gases shall be:
    - (i) Zero air (less than 10 ppm of hydrocarbon in air); and
    - (ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.
  - (5) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21.
- (b) When equipment is tested for compliance with or monitored for no detectable emissions, the Permittee shall comply with the following requirements:
  - (1) The requirements of paragraphs (a) (1) through (4) shall apply.
  - (2) The background level shall be determined, as set forth in Method 21.
  - (3) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21.
  - (4) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(c)

(1) Each piece of equipment within a process unit that can conceivably contain equipment in VHAP service is presumed to be in VHAP service unless the Permittee demonstrates that the piece of equipment is not in VHAP service. For a piece of equipment to be considered not in VHAP service, it shall be determined

that the percent VHAP content can be reasonably expected never to exceed 10 percent by weight. For purposes of determining the percent VHAP content of the process fluid that is contained in or contacts equipment, procedures that conform to the methods described in ASTM Method D-2267 (incorporated by the reference as specified in 40 CFR 61.18) shall be used.

(2)

- (i) The Permittee may use engineering judgment rather than the procedures in paragraph (c)(1) of this section to demonstrate that the percent VHAP content does not exceed 10 percent by weight, provided that the engineering judgment demonstrates that the VHAP content clearly does not exceed 10 percent by weight. When the Permittee and the Executive Secretary do not agree on whether a piece of equipment is not in VHAP service, however, the procedures in paragraph (c)(1) of this section shall be used to resolve the disagreement.
- (ii) If the Permittee determines that a piece of equipment is in VHAP service, the determination can be revised only after following the procedures in paragraph (c)(1) of this section.
- (3) Samples used in determining the percent VHAP content shall be representative of the process fluid that is contained in or contacts the equipment.

#### **Recordkeeping:**

#### (I) General Requirements

- (a) The Permittee shall comply with the recordkeeping requirements in 40 CFR 63.10 under 40 CFR 63 subpart A—General Provisions that are applicable to this condition as specified in Table 2 of 40 CFR 63 Subpart DD.
- (b) The Permittee shall maintain the records in accordance with the requirements of 40 CFR 63.10 of 40 CFR 63 and Section I.S.1 of this permit.

### (II) Specific Requirements

- (a) When each leak is detected as specified in sections III, VII, and VIII of this condition, the following requirements apply:
  - (1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
  - (2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in paragraph (c) section VII of this condition and no leak has been detected during those 2 months.
  - (3) The identification on equipment, except on a valve, may be removed after it has been repaired.
- (b) When each leak is detected as specified in sections III, VII, and VIII of this condition, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location:
  - (1) The instrument and operator identification numbers and the equipment identification number.
  - (2) The date the leak was detected and the dates of each attempt to repair the leak.
  - (3) Repair methods applied in each attempt to repair the leak.
  - (4) "Above 10,000" if the maximum instrument reading measured by the methods specified in monitoring after each repair attempt is equal to or greater than 10,000 ppm.
  - (5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

II.B.3.b.2

- (6) The signature of the Permittee (or designate) whose decision it was that repair could not be effected without a process shutdown.
- (7) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days unrepaired.
- (8) Dates of process unit shutdowns that occur while the equipment is unrepaired.
- (9) The date of successful repair of the leak.
- (c) The following information pertaining to all equipment to which a standard applies shall be recorded in a log that is kept in a readily accessible location:
  - (1) A list of identification numbers for equipment (except welded fittings) subject to the requirements of this condition.
  - (2) A list of equipment identification numbers for pressure relief devices required to comply with paragraph (a) section IV of this condition.

(3)

- (i) The dates of each compliance test required in section IV of this condition.
- (ii) The background level measured during each compliance test if that measurement did not assume a zero background level.
- (iii) The maximum instrument reading measured at the equipment during each compliance test.
- (d) The following information pertaining to all valves subject to the requirements of paragraphs (f) and (g) of section VII of this condition shall be recorded in a log that is kept in a readily accessible location:
  - (1) A list of identification numbers for valves that are designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve.
  - (2) A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.
- (e) The following information shall be recorded for valves complying with section XI of this condition:
  - (1) A schedule of monitoring.
  - (2) The percent of valves found leaking during each monitoring period.
- (f) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in the applicability section of this condition:
  - (1) An analysis demonstrating the design capacity of the process unit, and
  - (2) An analysis demonstrating that equipment is not in VHAP service.
- (g) Information and data used to demonstrate that a pie ce of equipment is not in VHAP service shall be recorded in a log that is kept in a readily accessible location.

#### Reporting:

#### (I) General Requirements

- (a) The permittee shall comply with the reporting requirements in Section I of this permit. In addition, the Permittee shall comply with the notification requirements specified in paragraph (a)(1) of this section and the reporting requirements specified in paragraph (a)(2) of this section.
  - (1) The Permittee shall submit notices to the Executive Secretary in accordance with the applicable notification requirements in 40 CFR 63.9 as specified in Table 2 of 40 CFR 63 Subpart DD.

#### II.B.3.b.3

- (2) The Permittee shall submit reports to the Executive Secretary in accordance with the applicable reporting requirements in 40 CFR 63.10 as specified in Table 2 of 40 CFR 63 Subpart DD.
- (b) The Permittee shall send a copy of each report submitted to the Executive Secretary to Region 8 of the EPA to the address given in Section I of this permit.

#### (II) Specific Requirements.

- (a) A report shall be submitted to the Executive Secretary semiannually starting 6 months after the initial report required in paragraph (a) of 40 CFR 61.247, that includes the following information:
  - (1) Process unit identification.
  - (2) For each month during the semiannual reporting period,
    - (i) Number of valves for which leaks were detected as described in paragraph (b) of section VII of this condition.
    - (ii) Number of valves for which leaks were not repaired as required in paragraph (d) section VII of this condition.
    - (iii) Number of pumps for which leaks were detected as described in paragraph (b) section III of this condition.
    - (iv) Number of pumps for which leaks were not repaired as required in paragraph (c) section III of this condition.
    - (v) The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible.
  - (3) Dates of process unit shutdowns which occurred within the semiannual reporting period.
  - (4) Revisions to items reported according to paragraph (a) of 40 CFR 61.247 if changes have occurred since the initial report or subsequent revisions to the initial report.
  - (5) The results of all performance tests and monitoring to determine compliance with no detectable emissions and with sections X and XI of this condition conducted within the semiannual reporting period.
- (b) In the first report submitted as required in paragraph (a) of 40 CFR 61.247, the report shall include a reporting schedule stating the months that semiannual reports shall be submitted. Subsequent reports shall be submitted according to that schedule, unless a revised schedule has been submitted in a previous semiannual report.
- (c) The Permittee electing to comply with the provisions of sections X and XI of this condition shall notify the Executive Secretary of the alternative standard selected 90 days before implementing either of the provisions.
- (d) An application for approval of construction or modification, 40 CFR 61.05(a) and 61.07, will not be required if—
  - (1) The new source complies with the standards of this condition;
  - (2) The new source is not part of the construction of a process unit; and
  - (3) In the next semiannual report required by paragraph (a) of this section, the information in paragraph (a)(5) of 40 CFR 61.247 is reported.

#### II.B.4 Conditions on Off-Site Material Containers (CNT)

#### II.B.4.a Condition: 40 CFR Part 61, Subpart FF

#### (I) Affected Wastes

(a) Each waste which enters the permittee's facility which includes a notice from the waste generator stating that the waste contains benzene which is required to be

- managed and treated in accordance with the provisions of 40 CFR 61 Subpart FF (see 40 CFR 61.342(f)(2)), shall be managed and treated in accordance with the standards of this condition.
- (b) When the total annual benzene (TAB) quantity as determined by the procedures in (a) of monitoring is equal to or greater than 10 Mg/yr, the permittee shall manage and treat each waste received from chemical manufacturing plants, coke by-product recovery plants, and petroleum refineries in accordance with the standards of this condition.

#### (II) Container Management Standards

- (a) The Permittee shall meet the following standards for each container in which an affected waste is placed or present: *Container* means any portable waste management unit in which a material is stored, transported, treated, or otherwise handled. Examples of containers are drums, barrels, tank trucks, barges, dumpsters, tank cars, dump trucks, and ships.
  - (1) The Permittee shall install, operate, and maintain a cover in accordance with the following requirements:
    - (i) The cover and all openings (e.g., bungs, hatches, and sampling ports) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in (b) of monitoring.
    - (ii) Except as provided in paragraph (a)(4) of this section, each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the container except when it is necessary to use the opening for waste loading, removal, inspection, or sampling.
  - (2) When a waste is transferred into a container by pumping, the Permittee shall perform the transfer using a submerged fill pipe. The submerged fill pipe outlet shall extend to within two fill pipe diameters of the bottom of the container while the container is being loaded. During loading of the waste, the cover shall remain in place and all openings shall be maintained in a closed, sealed position except for those openings required for the submerged fill pipe, those openings required for venting of the container to prevent physical damage or permanent deformation of the container or cover, and any openings complying with paragraph (a)(4) of this section.
  - (3) Treatment of a waste in a container, including aeration, thermal or other treatment, must be performed by the permittee in a manner such that while the waste is being treated the container meets the standards specified in paragraphs (a)(3)(i) through (a)(3)(iii) below, except for covers and closed-vent systems that meet the requirements in paragraph (a)(4) below.
    - (i) The permittee must either:
      - (A) Vent the container inside a total enclosure which is exhausted through a closed-vent system to a control device in accordance with the requirements of paragraphs (a)(3)(ii)(A) and (B) below; or
      - (B) Vent the covered or closed container directly through a closed-vent system to a control device in accordance with the requirements of paragraphs (a)(3)(ii)(B) and (C) below.
    - (ii) The permittee must meet the following requirements, as applicable to the type of air emission control equipment selected by the owner or operator:

- (A) The total enclosure must be designed and operated in accordance with the criteria for a permanent total enclosure as specified in section 5 of the "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" in 40 CFR 52.741, appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of containers through the enclosure by conveyor or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The owner or operator must perform the verification procedure for the enclosure as specified in section 5.0 of "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" initially when the enclosure is first installed and, thereafter, annually. A facility that has conducted an initial compliance demonstration and that performs annual compliance demonstrations in accordance with the Container Level 3 control requirements in 40 CFR 264.1086(e)(2)(i) or 40 CFR 265.1086(e)(2)(i) is not required to make repeat demonstrations of initial and continuous compliance for the purposes of this condition.
- (B) The closed-vent system and control device must be designed and operated in accordance with the requirements of 40 CFR 61.349.
- (C) For a container cover, the cover and all openings (*e.g.*, doors, hatches) must be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h).
- (iii) Safety devices, as defined in 40 CFR 61.341, may be installed and operated as necessary on any container, enclosure, closed-vent system, or control device used to comply with the requirements of paragraph (e)(1) of 40 CFR 63.345.
- (4) If the cover and closed-vent system operate such that the container is maintained at a pressure less than atmospheric pressure, the Permittee may operate the system with an opening that is not sealed and kept closed at all times if the following conditions are met:
  - (i) The purpose of the opening is to provide dilution air to reduce the explosion hazard;
  - (ii) The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by methods specified in (b) of monitoring; and
  - (iii) The pressure is monitored continuously to ensure that the pressure in the container remains below atmospheric pressure.
- (b) Each cover and all openings shall be visually inspected initially and quarterly thereafter to ensure that they are closed and gasketed properly.
- (c) Except as provided in section V of this condition, when a broken seal or gasket or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

#### (III) Closed Vent System and Control Device

(a) The closed-vent system and control device shall be designed and operated in accordance with the following requirements.

- (1) The closed-vent system shall:
  - (i) Be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in (b) of monitoring.
  - (ii) All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
- (2) The control devices shall be designed and operated in accordance with the following conditions:
  - (i) The incinerator shall provide a minimum residence time of 0.5 seconds at a minimum temperature of 760°C (1,400 °F).
  - (ii) The carbon adsorption systems shall recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater.
- (b) The closed-vent system and incinerator or carbon adsorption system shall be operated at all times when an affected waste is placed or present in a container and the container is vented to the incinerator or carbon adsorption system.
- (c) The Permittee shall demonstrate that each control device achieves the appropriate conditions specified in paragraph (a)(2) of this section by using engineering calculations in accordance with requirements specified in (f) of recordkeeping.
- (d) The Executive Secretary may request at any time the Permittee demonstrate that a control device meets the applicable conditions specified in paragraph (a)(2) of this section by conducting a performance test using the test methods and procedures as required in 40 CFR 61.355.
- (e) Each closed-vent system and control device shall be visually inspected initially and quarterly thereafter. The visual inspection shall include inspection of ductwork and piping and connections to covers and control devices for evidence of visible defects such as holes in ductwork or piping and loose connections.
- (f) Except as provided in section V of this condition, if visible defects are observed during an inspection, or if other problems are identified, or if detectable emissions are measured, a first effort to repair the closed-vent system and control device shall be made as soon as practicable but no later than 5 calendar days after detection. Repair shall be completed no later than 15 calendar days after the emissions are detected or the visible defect is observed.

#### (IV) Treatment Standards

- (a) Incinerator
  - (1) The Permittee shall treat affected waste in affected containers in accordance with the following requirements:
    - (i) The Permittee shall design, install, operate, and maintain a treatment process that destroys benzene in the waste by incinerating the waste in a combustion unit that achieves a destruction efficiency of 99 percent or greater for benzene.
    - (ii) The Permittee may aggregate or mix together individual wastes to create a combined waste for the purpose of facilitating treatment of waste to comply with the requirements of paragraph (a)(1)(i) of this section.
  - (2) A treatment process is in compliance with the requirements of this condition provided that the Permittee documents that the treatment process is a hazardous waste incinerator for which the Permittee has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 264, subpart 0.
  - (3) Except as specified in paragraph (a)(3)(iii) of this section, if the treatment process has any openings (e.g., access doors, hatches, etc.), all such openings

shall be sealed (e.g., gasketed, latched, etc.) and kept closed at all times when waste is being treated, except during inspection and maintenance.

- (i) Each seal, access door, and all other openings shall be checked by visual inspections initially and quarterly thereafter to ensure that no cracks or gaps occur and that openings are closed and gasketed properly.
- (ii) Except as provided in section V of this condition, when a broken seal or gasket or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.
- (iii) If the cover and closed-vent system operate such that the treatment process is maintained at a pressure less than atmospheric pressure, the Permittee may operate the system with an opening that is not sealed and kept closed at all times if the following conditions are met:
  - (A) The purpose of the opening is to provide dilution air to reduce the explosion hazard;
  - (B) The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in (b) of monitoring; and
  - (C) The pressure is monitored continuously to ensure that the pressure in the treatment process remains below atmospheric pressure.
  - (D) Treatment process system pressures not less than atmospheric pressure shall be addressed by the Compliance Plan and Schedule found in Section V of this permit. [Authority granted under R307-415-6c(3); Condition originated in Title V Application as amended June 12, 2003].

#### (b) Send Offsite

- (1) Rather than treating the waste onsite, the Permittee may elect to transfer affected wastes offsite to another facility where the waste is treated in accordance with the requirements of 40 CFR 61.342(c)(1)(i). If the Permittee transfers the waste offsite, the permittee shall:
  - (i) Comply with the standards of this condition prior to shipment of the waste offsite.
  - (ii) Include with each offsite waste shipment a notice stating that the waste contains benzene which is required to be managed and treated in accordance with the provisions of 40 CFR 61 Subpart FF.

#### (V) Delay of repair.

- (a) Delay of repair will be allowed if the repair is technically impossible without a complete or partial facility or unit shutdown.
- (b) Repair of such equipment shall occur before the end of the next facility or unit shutdown.

[Authority granted under 40 CFR Part 61.345 (Subpart FF); condition originated in DAQE-168-02]

## II.B.4.a.1 **Monitoring:**

- (a) The Permittee shall determine the TAB quantity by the following procedure:
  - (1) For each waste received from a chemical manufacturing plant, coke by-product recovery plant, or petroleum refinery having a flow-weighted annual average water content greater than 10 percent water, on a volume basis as total water, as

indicated from information provided by the generator for the associated waste stream at the generator's facility or is mixed with water or other wastes at the permittee's facility at any time and the resulting mixture has an average water content greater than 10 percent, the Permittee shall:

- (i) Determine the waste quantity at the point where the waste enters the permittee's facility.
- (ii) Determine the flow-weighted annual average benzene concentration from information provided by the generator for the associated waste stream at the generator's facility.
- (iii) Calculate the benzene quantity for the waste by multiplying the waste quantity times the flow-weighted annual average benzene concentration of the waste.
- (2) The TAB quantity is calculated by adding together the benzene quantity as determined in (a)(1) above for each waste which enters the permitted source during the year.
- (b) The Permittee shall test equipment for compliance with no detectable emissions in accordance with the following requirements:
  - (1) Monitoring shall comply with Method 21 from appendix A of 40 CFR part 60.
  - (2) The detection instrument shall meet the performance criteria of Method 21.
  - (3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21.
  - (4) Calibration gases shall be:
    - (i) Zero air (less than 10 ppm of hydrocarbon in air); and
    - (ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.
  - (5) The background level shall be determined as set forth in Method 21.
  - (6) The instrument probe shall be traversed around all potential leak interfaces as close as possible to the interface as described in Method 21.
  - (7) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared to 500 ppm for determining compliance.
- (c) For each system using an emission control that is maintained at a pressure less than atmospheric pressure with openings to provide dilution air, the Permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications a device equipped with a continuous recorder to monitor the pressure in the unit to ensure that it is less than atmospheric pressure.
- (d) The Permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor the control device operation as specified in the following paragraphs. The Permittee shall inspect at least once each operating day the data recorded by the monitoring equipment (e.g., temperature monitor or flow indicator) to ensure that the control device is operating properly.
- (e) For the incinerator, a temperature-monitoring device equipped with a continuous recorder. The device shall have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5°C, whichever is greater. The temperature sensor shall be installed at a representative location in the combustion chamber. The Permittee shall replace the carbon in the carbon adsorption systems with fresh carbon at a regular predetermined time interval that is less than the carbon replacement interval that is determined by the maximum design flow rate and either the organic concentration or the benzene concentration in the gas stream vented to the carbon adsorption system.

#### II.B.4.a.2

#### **Recordkeeping:**

- (a) The Permittee shall comply with the recordkeeping requirements of section I.S.1 of this permit. In addition, each record shall be maintained in a readily accessible location at the facility site for a period not less than five years from the date the information is recorded unless otherwise specified.
- (b) The Permittee shall maintain records that identify each waste received from chemical manufacturing plants, coke by product recovery plants, and petroleum refineries, and indicate whether or not the waste is controlled for benzene emissions in accordance with this condition. In addition the Permittee shall maintain the following records. For each waste received from chemical manufacturing plants, coke by product recovery plants, and petroleum refineries not controlled for benzene emissions in accordance with this condition, the records shall include all test results, measurements, calculations, and other documentation used to determine the following information for the waste including: waste identification, water content, whether or not the waste is a process wastewater stream, waste quantity, range of benzene concentrations for the associated waste stream at the generator's facility, annual average flowweighted benzene concentration, and benzene quantity.
- (c) The Permittee transferring waste off-site to another facility for treatment in accordance with (b) of section IV of this condition shall maintain documentation for each offsite waste shipment that includes the following information: Date waste is shipped offsite, quantity of waste shipped offsite, name and address of the facility receiving the waste, and a copy of the notice sent with the waste shipment.
- (d) The Permittee shall maintain engineering design documentation for all control equipment required by this condition that is installed on the containers. The documentation shall be retained for the life of the control equipment.
- (e) The Permittee shall maintain the following records for the treatment unit. The documentation shall be retained for the life of the unit. A statement signed and dated by the Permittee certifying that the unit is permitted as a 40 CFR part 264 Subpart O incinerator.
- (f) For the closed-vent systems and control devices, the Permittee shall maintain the following records. The documentation shall be retained for the life of the control devices.
  - (1) A statement signed and dated by the Permittee certifying that the closed-vent systems and control devices are designed to operate at the documented performance level when a container containing an affected waste is vented to the control device is or would be operating at the highest load or capacity expected to occur.
  - (2) A design analysis for the control device that includes for example:
    - (i) Specifications, drawings, schematics, and piping and instrumentation diagrams prepared by the Permittee, or the control device manufacturer or vendor that describe the control device design based on acceptable engineering texts. The design analysis shall address the following vent stream characteristics and control device operating parameters:
      - (A) For the incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.

- (B) For the carbon adsorption systems, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level or the design exhaust vent stream benzene concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.
- (g) The Permittee shall maintain a record for each visual inspection that identifies a problem (such as a broken seal, gap or other problem) which could result in benzene emissions. The record shall include the date of the inspection, waste management unit and control equipment location where the problem is identified, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed.
- (h) The Permittee shall maintain a record for each test of no detectable emissions. The record shall include the following information: date the test is performed, background level measured during test, and maximum concentration indicated by the instrument reading measured for each potential leak interface. If detectable emissions are measured at a leak interface, then the record shall also include the waste management unit, control equipment, and leak interface location where detectable emissions were measured, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed.
- (i) The Permittee shall maintain documentation that includes the following information regarding the treatment unit operation:
  - (1) Dates of startup and shutdown of the unit.
  - (2) Periods when the unit is not operated as designed.
- (j) For each control device, the Permittee shall maintain documentation that includes the following information regarding the control device operation:
  - (1) Dates of startup and shutdown of the closed-vent system and control device.
  - (2) A description of the operating parameter (or parameters) to be monitored to ensure that the control device will be operated in conformance with these standards and the control device's design specifications and an explanation of the criteria used for selection of that parameter (or parameters). This documentation shall be kept for the life of the control device.
  - (3) Periods when the closed-vent system and control device are not operated as designed.
  - (4) The Permittee shall maintain continuous records of the temperature of the gas stream in the combustion zone of the incinerator and records of all 3-hour periods of operation during which the average temperature of the gas stream in the combustion zone is more than 28°C (50 °F) below the design combustion zone temperature.
  - (5) The Permittee shall record each occurrence when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time.
  - (6) For the carbon adsorbers, the Permittee shall maintain records of dates and times when the control device is monitored, and shall record the date and time that the existing carbon in the control device is replaced with fresh carbon.
- (k) If a system is used for emission control that is maintained at a pressure less than atmospheric pressure with openings to provide dilution air, the Permittee shall maintain records of the monitoring device and records of all periods during

- which the pressure in the unit is operated at a pressure that is equal to or greater than atmospheric pressure.
- (1) If a total enclosure is used to comply with the control requirements for containers, then the permittee must keep records (1) and (2) listed below. The permittee may use records as required in 40 CFR 264.1089(d)(1) or 40 CFR 265.1090(d)(1) to meet the recordkeeping requirement in paragraph (1) below. The permittee must make the records of each verification of a total enclosure available for inspection upon request.
  - (1) Records of the most recent set of calculations and measurements performed to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" in 40 CFR 52.741, appendix B;
  - (2) Records required for a closed-vent system and control device according to the requirements in paragraphs (d), (f) and (j) above.

#### **Reporting:**

- (a) The permittee shall comply with the reporting requirements in Section I of this Permit. In addition, the permittee shall submit a report that includes the following information according to the schedule provided below.
  - (1) Total annual benzene quantity from waste received from applicable waste generators determined in accordance with the procedures in (a) of monitoring.
  - (2) A table identifying each container received from applicable waste generators and whether or not the container will be controlled for benzene emissions in accordance with the requirements of this condition.
  - (3) For each container received from an applicable waste generator identified as not being controlled for benzene emissions in accordance with the requirements of this condition the following information shall be added to the table:
    - (i) Whether or not the water content of the waste is greater than 10 percent;
    - (ii) Whether or not the waste is a process wastewater stream, product tank drawdown, or landfill leachate;
    - (iii) Quantity for the waste;
    - (iv) Benzene concentrations for the waste:
    - (v) Average benzene concentration for the waste; and
    - (vi) Benzene quantity for the waste.
  - (4) The Permittee only needs to list in the report those wastes received from applicable waste generators that contact materials containing benzene. The report does not need to include a description of the controls to be installed to comply with the standard or other information required in 40 CFR 61.10(a).
- (b) If the total annual benzene quantity from containers received from applicable waste generators is less than 1 Mg/yr (1.1 ton/yr), then the Permittee shall submit to the Executive Secretary a report that updates the information listed in paragraphs (a)(1) through (a)(3) of this section whenever there is a change in the wastes received that could cause the total annual benzene quantity from wastes received from applicable waste generators to increase to 1 Mg/yr (1.1 ton/yr) or more.
- (c) If the total annual benzene quantity from wastes received from applicable waste generators is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 ton/yr) then the Permittee shall submit to the Executive Secretary a report that updates the information listed in paragraphs (a)(1) through (a)(3) of this section. The report shall be submitted annually and whenever there is a change in the wastes received that could cause the total annual benzene quantity

#### II.B.4.a.3

- from wastes received from applicable waste generators to increase to 10 Mg/yr (11 ton/yr) or more. If the information in the annual report required by paragraphs (a)(1) through (a)(3) of this section is not changed in the following year, the Permittee may submit a statement to that effect.
- (d) The Permittee shall submit to the Executive Secretary the following reports:
  - (1) Prior to the date the total annual benzene quantity from waste received from applicable waste generators is equal to or greater than 10 Mg/yr, a certification that the equipment necessary to comply with these standards has been installed and that the required initial inspections or tests have been carried out in accordance with this condition.
  - (2) Beginning on the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of this section, the Permittee shall submit annually to the Executive Secretary a report that updates the information listed in paragraphs (a)(1) through (a)(3) of this section. If the information in the annual report required by paragraphs (a)(1) through (a)(3) of this section is not changed in the following year, the Permittee may submit a statement to that effect.
  - (3) Beginning 3 months after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of this section, the Permittee shall submit quarterly to the Executive Secretary a certification that all of the required inspections have been carried out in accordance with the requirements of this condition.
  - (4) Beginning 3 months after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of this section, the Permittee shall submit a report quarterly to the Executive Secretary that includes:
    - (i) Each period of operation monitored during which any of the following conditions occur, as applicable to the control device:
      - (A) Each 3-hour period of operation during which the average temperature of the gas stream in the combustion zone of the incinerator, as measured by the temperature monitoring device, is more than 28°C (50 °F) below the design combustion zone temperature.
      - (B) Each occurrence when the carbon in a carbon adsorber system is not replaced at the predetermined interval.
    - (ii) For a cover and closed-vent system monitored in accordance with (c) of monitoring, the Permittee shall submit a report quarterly to the Executive Secretary that identifies any period in which the pressure in the unit is equal to or greater than atmospheric pressure.
  - (5) Beginning one year after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of this section, the Permittee shall submit annually to the Executive Secretary a report that summarizes all inspections during which detectable emissions are measured or a problem (such as a broken seal, gap or other problem) that could result in benzene emissions is identified, including information about the repairs or corrective action taken.
- (e) Certified Progress Reports. [Authority granted under R307-415-6c(4); Condition originated in Title V Application as amended June 12, 2003]

The permittee shall also submit certified progress reports every month until all specified milestones in Section V of this permit have been completed. The certified project reports shall contain the following information:

- (1) Dates for achieving the activities, milestones, or compliance required in Section V and dates when such activities, milestones or compliance were achieved; and
- (2) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

The first certified progress report will be due one month from the date that this permit is issued.

(f) The Permittee shall send a copy of each report submitted to the Executive Secretary to Region 8 of the EPA to the address given in Section I of this permit.

#### II.B.4.b Condition: 40 CFR Part 63, Subpart DD

#### (I) Affected Containers

(a) For each container, the Permittee shall meet the requirements in either paragraph (2), or (3) of this section except for those containers subject to 40 CFR 61 Subpart FF (see previous condition) and those containers that do not contain off-site materials as specified in (1).

Off-site material stream means an off-site material produced or generated by a particular process or source such that the composition and form of the material comprising the stream remain consistent. An off-site material stream may be delivered, transferred, or otherwise moved to the plant site in a continuous flow of material (e.g., wastewater flowing through a pipeline) or in a series of discrete batches of material (e.g., a truckload of drums all containing the same off-site material or multiple bulk truck loads of an off-site material produced by the same process).

Container means a portable unit used to hold material. Examples of containers include but are not limited to drums, dumpsters, roll-off boxes, bulk cargo containers commonly known as "portable tanks" or "totes", cargo tank trucks, and tank rail cars.

- (1) The following materials are not off-site materials:
  - (i) Household waste as defined in 40 CFR 258.2.
  - (ii) Waste that is generated as a result of implementing remedial activities required under the Resource Conservation and Recovery Act (RCRA) corrective action authorities (RCRA sections 3004(u), 3004(v), or 3008(h)), Comprehensive Environmental Response, Compensation, and Liability Act (CERLCLA) authorites, or similar Federal or State authorites.
  - (iii) Waste containing HAP that is generated by residential households (e.g., old paint, home garden pesticides) and subsequently is collected as a community service by government agencies, businesses, or other organizations for the purpose of promoting the proper disposal of this waste.
  - (iv) Hazardous waste that is stored for 10 days or less at a transfer facility in compliance with the provisions of 40 CFR 263.12.

- (2) Control air emissions from the container in accordance with the applicable standards specified in sections II. III. IV and V of this condition.
- (3) Determine before placing off-site material in the container that the average volatile organic hazardous air pollutant (VOHAP) concentration of the off-site material is less than 500 parts per million by weight (ppmw) at the point-of-delivery. The Permittee shall perform an initial determination of the average VOHAP concentration of the off-site material using the procedures specified in section (a) of monitoring. This initial determination shall be performed before the first time any portion of the off-site material stream is placed in the container. Thereafter, the Permittee shall review and update, as necessary, this determination at least once every calendar year following the date of the initial determination for the off-site material stream.
- (b) A container is exempted from the requirements in paragraph (a) of this section if the off-site material placed in the unit is a hazardous waste that meets the conditions specified in either paragraph (1) or (2).
  - (1) The hazardous waste meets the numerical organic concentration limits, applicable to the hazardous waste, as specified in 40 CFR part 268—Land Disposal Restrictions, listed in the table, "Treatment Standards for Hazardous Waste" in 40 CFR 268.40.
  - (2) The organic hazardous constituents in the hazardous waste have been treated by the treatment technology established by the EPA for the hazardous waste in 40 CFR 268.42(a), or have been removed or destroyed by an equivalent method of treatment approved by the EPA under 40 CFR 268.42(b).

# (II) Standards: Containers 0.1 to 0.46 m<sup>3</sup> and larger containers not in light material service.

(a) For a container having a design capacity greater than 0.1 m³ and less than or equal to 0.46 m³ and for containers larger than 0.46 m³ not in light material service, the Permittee shall control air emissions using Container Level 1 controls as specified below.

Light-material service means the container is used to manage an off-site material for which both of the following conditions apply: the vapor pressure of one or more of the organic constituents in the off-site material is greater than 0.3 kilopascals (kPa) at 20 °C; and the total concentration of the pure organic constituents having a vapor pressure greater than 0.3 kPa at 20 °C is equal to or greater than 20 percent by weight.

- (b) A container using Container Level 1 controls is one of the following:
  - (1) A container that meets the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as specified in section (e).
  - (2) A container equipped with a cover and closure devices that form a continuous barrier over the container openings such that when the cover and closure devices are secured in the closed position there are no visible holes, gaps, or other open spaces into the interior of the container. The cover may be a separate cover installed on the container (e.g., a lid on a drum, a suitably secured tarp on a roll-off box) or may be an integral part of the container structural design (e.g., a bulk cargo container equipped with a screw-type cap).
  - (3) An open-top container in which an organic vapor-suppressing barrier is placed on or over the regulated-material in the container such that no regulated-material is exposed to the atmosphere. One example of such a barrier is application of a suitable organic -vapor suppressing foam.

- (c) A container used to meet the requirements of either paragraph (b)(2) or (b)(3) of this section shall be equipped with covers and closure devices, as applicable to the container, that are composed of suitable materials to minimize exposure of the regulated-material to the atmosphere and to maintain the equipment integrity for as long as it is in service. Factors to be considered when selecting the materials for and designing the cover and closure devices shall include: organic vapor permeability, the effects of contact with the material or its vapor managed in the container; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for container on which the cover is installed.
- (d) Whenever a regulated-material is in a container using Container Level 1 controls, the Permittee shall install all covers and closure devices for the container, and secure and maintain each closure device in the closed position except as follows:
  - (1) Opening of a closure device or cover is allowed for the purpose of adding material to the container as follows:
    - (i) In the case when the container is filled to the intended final level in one continuous operation, the Permittee shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.
    - (ii) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the Permittee shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either: the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaves the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.
  - (2) Opening of a closure device or cover is allowed for the purpose of removing material from the container as follows:
    - (i) For the purpose of meeting the requirements of this section, an empty container as defined in this condition may be open to the atmosphere at any time (e.g., covers and closure devices are not required to be secured in the closed position on an empty container).

      Empty container means a container for which either of the following conditions exists: the container meets the conditions for an empty container specified in 40 CFR 261.7(b); or all regulated-material has been removed from the container except for any regulated-material that remains on the interior surfaces of the container as clingage or in pools on the container bottom due to irregularities in the container.
    - (ii) In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container as defined in this condition, the Permittee shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes, or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.
  - (3) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of regulated-material.

- Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the Permittee shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.
- (4) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the container internal pressure in accordance with the container design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the container internal pressure is within the internal pressure operating range determined by the Permittee based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the container internal pressure exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.
- (5) Opening of a safety device, as defined in this condition, is allowed at any time conditions require it to do so to avoid an unsafe condition. Safety device means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions to prevent physical damage or permanent deformation to equipment by venting gases or vapors during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purpose of this condition, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the equipment as determined by the Permittee based on manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials.
- (e) For the purpose of compliance with paragraph (b)(1) of this section, containers shall be used that meet the applicable U.S. DOT regulations on packaging hazardous materials for transportation as follows:
  - (1) The container meets the applicable requirements specified in 49 CFR part 178—Specifications for Packagings or 49 CFR part 179—Specifications for Tank Cars.
  - (2) Regulated-material is managed in the container in accordance with the applicable requirements specified in 49 CFR part 107 subpart B—Exemptions; 49 CFR part 172—Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements; 49 CFR part 173—Shippers—General Requirements for Shipments and Packaging; and 49 CFR part 180—Continuing Qualification and Maintenance of Packagings.

- (3) For the purpose of complying with this condition, no exceptions to the 49 CFR part 178 or part 179 regulations are allowed except as provided for in paragraph (4) of this section.
- (4) For a lab pack that is managed in accordance with the requirements of 49 CFR part 178 for the purpose of complying with this condition, the Permittee may comply with the exceptions for those packagings specified in 49 CFR 173.12(b).

## (III) Standards: Containers Greater than 0.46 m<sup>3</sup> in Light Material Service.

- For a container having a design capacity greater than 0.46 m<sup>3</sup> and the container is in light-material service, the Permittee shall control air emissions from the container using Container Level 2 controls as specified below.
- (b) A container using Container Level 2 controls is one of the following:
  - (1) A container that meets the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as specified in section (e).
  - (2) A container that has been demonstrated to operate with no detectable organic emissions as defined in this condition.
    - *No detectable organic emissions* means no escape of organics to the atmosphere as determined using the procedure specified in section (b) of monitoring.
  - (3) A container that has been demonstrated within the preceding 12 months to be vapor-tight by using Method 27 in Appendix A of 40 CFR part 60 in accordance with the procedure specified in section (c) of monitoring.
- (c) Transfer of regulated-material in to or out of a container using Container Level 2 controls shall be conducted in such a manner as to minimize exposure of the regulated-material to the atmosphere, to the extent practical, considering the physical properties of the regulated-material and good engineering and safety practices for handling flammable, ignitable, explosive, or other hazardous materials. Examples of container loading procedures that meet the requirements of this paragraph include using any one of the following: a submerged-fill pipe or other submerged-fill method to load liquids into the container; a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or a fitted opening in the top of a container through which the regulated-material is filled, with subsequent purging of the transfer line before removing it from the container opening.
- (d) Whenever a regulated-material is in a container using Container Level 2 controls, the Permittee shall install all covers and closure devices for the container, and secure and maintain each closure device in the closed position except as follows:
  - (1) Opening of a closure device or cover is allowed for the purpose of adding material to the container as follows:
    - (i) In the case when the container is filled to the intended final level in one continuous operation, the Permittee shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.
    - (ii) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the Permittee shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level, the completion of a batch loading after which no additional material will be added to the container within 15 minutes, the person performing the loading operation leaves the

- immediate vicinity of the container, or the shutdown of the process generating the material being added to the container, whichever condition occurs first.
- (2) Opening of a closure device or cover is allowed for the purpose of removing material from the container as follows:
  - (i) For the purpose of meeting the requirements of this section, an empty container as defined in this condition may be open to the atmosphere at any time (e.g., covers and closure devices are not required to be secured in the closed position on an empty container).
  - (ii) In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container as defined in this condition, the Permittee shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.
- (3) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of regulated-material. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the Permittee shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.
- (4) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the container internal pressure in accordance with the container design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the container internal pressure is within the internal pressure operating range determined by the Permittee based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the container internal pressure exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.
- (5) Opening of a safety device, as defined in this condition, is allowed at any time conditions require it to do so to avoid an unsafe condition.
- (e) For the purpose of compliance with paragraph (b)(1) of this section, containers shall be used that meet the applicable U.S. DOT regulations on packaging hazardous materials for transportation as follows:
  - (1) The container meets the applicable requirements specified in 49 CFR part 178—Specifications for Packagings or 49 CFR part 179—Specifications for Tank Cars.
  - (2) Regulated-material is managed in the container in accordance with the applicable requirements specified in 49 CFR part 107 subpart B— Exemptions; 49 CFR part

- 172—Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements; 49 CFR part 173— Shippers—General Requirements for Shipments and Packaging; and 49 CFR part 180—Continuing Qualification and Maintenance of Packagings.
- (3) For the purpose of complying with this condition, no exceptions to the 49 CFR part 178 or part 179 regulations are allowed except as provided for in paragraph (4) of this section.
- (4) For a lab pack that is managed in accordance with the requirements of 49 CFR part 178 for the purpose of complying with this condition, the Permittee may comply with the exceptions for those packagings specified in 49 CFR 173.12(b).

# (IV) Standards: Containers Greater than 0.1 m<sup>3</sup> used for Treatment of Off-Site Material.

(a) For a container having a design capacity greater than 0.1 m<sup>3</sup> and is used for treatment of an off-site material by a waste stabilization process, the Permittee shall control air emissions from the container at those times during the process when the off-site material in the container is exposed to the atmosphere using Container Level 3 controls as specified below.

Waste stabilization process means any physical or chemical process used to either reduce the mobility of hazardous constituents in a waste or eliminate free liquids as determined by Test Method 9095—Paint Filter Liquids Test in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846, Third Edition, September 1986, as amended by Update I, November 15, 1992. (As an alternative, the Permittee may use any more recent, updated version of Method 9095 approved by the EPA.) A waste stabilization process includes mixing the waste with binders or other materials and curing the resulting waste and binder mixture. Other synonymous terms used to refer to this process are "waste fixation" or "waste solidification." A waste stabilization process does not include the adding of absorbent materials to the surface of a waste, without mixing, agitation, or subsequent curing, to absorb free liquid.

- (b) A container using Container Level 3 controls is a container that is vented inside an enclosure which is exhausted through a closed-vent system to a control device in accordance with the requirements of paragraphs (1) and (2) of section (c).
- (c) The Permittee shall meet the following requirements as applicable to the type of air emission control equipment selected by the Permittee:
  - (1) The enclosure shall be designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, Appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of containers through the enclosure by conveyor or other mechanical means; entry of permanent mechanical or electrical equipment; or to direct airflow into the enclosure. The Permittee shall perform the verification procedure for the enclosure as specified in Section 5.0 to "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" initially when the enclosure is first installed and, thereafter, annually.
  - (2) The closed-vent system and control device shall be designed and operated in accordance with the requirements of Section V of this condition.
- (d) Safety devices may be installed and operated as necessary on any container, enclosure, closed-vent system, or control device used to comply with this section.

#### (V) Standards: Container Level 3 Closed-Vent System and Control Devices

- (a) Closed-vent system and requirements.
  - (1) The vent stream required to be controlled shall be conveyed to the control device by a closed-vent system that is designed to operate with no detectable organic emissions using the procedure specified in section (b) of monitoring.
- (b) Carbon adsorption control device requirements.
  - (1) The carbon adsorption system shall recover 95 percent or more, on a weight-basis, of the total organic compounds (TOC), less methane and ethane, contained in the vent stream entering the carbon adsorption system.
  - (2) The Permittee shall demonstrate that the carbon adsorption system achieves the performance requirements by a design analysis. The design analysis shall address the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature and shall establish the design exhaust vent stream organic compound concentration, carbon bed capacity, activated carbon type and working capacity, and design carbon replacement interval based on the total carbon working capacity of the control device and emission point operating schedule.
  - (3) The spent carbon removed from the carbon adsorption system shall be burned in a hazardous waste incinerator for which the Permittee has been issued a final permit under 40 CFR part 270 that implements the requirements of 40 CFR part 264, subpart O.
  - (4) The Permittee shall replace either the existing carbon canister with a new carbon canister or replace the existing carbon in the control device with fresh carbon at a regular, predetermined time interval that is less than the design carbon replacement interval established as a requirement of (2) of this section.
- (c) Vapor incinerator control device requirements.
  - (1) The Permittee shall maintain the conditions in the vapor incinerator combustion chamber at a residence time of 0.5 seconds or longer and at a temperature of 760°C or higher.
  - (2) The Permittee shall demonstrate that the vapor incinerator achieves the performance requirements in paragraph (1) of this section by a design analysis. The design analysis shall address the vent stream composition, constituent concentrations, and flow rate and shall establish the design minimum and average temperatures in the combustion chamber and the combustion chamber residence time.
  - (3) The Permittee shall monitor the operation of the vapor incinerator in accordance with the requirements of section (f) of monitoring using a continuous parameter monitoring system to measure and record the daily average temperature of the exhaust gases from the control device. The accuracy of the temperature monitoring device shall be ±1 percent of the temperature being measured, expressed in degrees Celsius of ±0.5°C, whichever is greater. [Authority granted under 40 CFR 63.688; condition originated in DAQE-168-02]

#### II.B.4.b.1

#### **Monitoring:**

- (a) Testing methods and procedures to determine average VOHAP concentration of an off-site material stream at the point-of-delivery.
  - (1) The average VOHAP concentration of an off-site material at the point-of-delivery shall be determined using either direct measurement as specified in paragraph (a)(2) of this section or by knowledge as specified in paragraph (a)(3) of this section.

- (2) Direct measurement to determine VOHAP concentration.
  - (i) Sampling. Samples of the off-site material stream shall be collected from the container (Note: all waste is delivered in containers) used to deliver the off-site material stream to the plant site in a manner such that volatilization of organics contained in the sample is minimized and an adequately representative sample is collected and maintained for analysis by the selected method.
    - (A) The averaging period to be used for determining the average VOHAP concentration for the off-site material stream on a mass-weighted average basis shall be designated and recorded. The averaging period can represent any time interval that the Permittee determines is appropriate for the off-site material stream but shall not exceed 1 year.
    - (B) A sufficient number of samples, but no less than four samples, shall be collected to represent the complete range of HAP compositions and HAP quantities that occur in the off-site material stream during the entire averaging period due to normal variations in the operating conditions for the source or process generating the off-site material stream. Examples of such normal variations are seasonal variations in off-site material quantity or fluctuations in ambient temperature.
    - (C) All samples shall be collected and handled in accordance with written procedures prepared by the Permittee and documented in a site sampling plan. This plan shall describe the procedure by which representative samples of the off-site material stream are collected such that a minimum loss of organics occurs throughout the sample collection and handling process and by which sample integrity is maintained. A copy of the written sampling plan shall be maintained on-site in the plant site operating records. An example of an acceptable sampling plan includes a plan incorporating sample collection and handling procedures in accordance with the requirements specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 or Method 25D in 40 CFR part 60, appendix A.
  - (ii) Analysis. Each collected sample shall be prepared and analyzed in accordance with one of the following methods as applicable to the sampled off-site material for the purpose of measuring the HAP listed in Table 1 of 40 CFR 63 Subpart DD:
    - (A) Method 305 in 40 CFR part 63, appendix A.
    - (B) Method 25D in 40 CFR part 60, appendix A.
    - (C) Method 624 in 40 CFR part 136, appendix A. If this method is used to analyze one or more compounds that are not on the method's published list of approved compounds, the Alternative Test Procedure specified in 40 CFR 136.4 and 40 CFR 136.5 shall be followed.
    - (D) Method 625 in 40 CFR part 136, appendix A. For the purpose of using this method to comply with this condition, the Permittee shall perform corrections to these compounds based on the "accuracy as recovery" using the factors in Table 7 of the method. If this method is used to analyze one or more compounds that are not on the method's published list of approved compounds, the Alternative Test Procedure specified in 40 CFR 136.4 and 40 CFR 136.5 shall be followed.
    - (E) Method 1624 in 40 CFR part 136, appendix A.
    - (F) Method 1625 in 40 CFR part 136, appendix A.

- (G) Method 8260 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846, Third Edition, September 1986, as amended by Update I, November 15, 1992. As an alternative, the Permittee may use any more recent, updated version of Method 8260 approved by the EPA. For the purpose of using Method 8260 to comply with this condition, the Permittee shall maintain a formal quality assurance program consistent with section 8 of Method 8260, and this program shall include the following elements related to measuring the concentrations of volatile compounds:
  - <u>1.</u> Documentation of site-specific procedures to minimize the loss of compounds due to volatilization, biodegradation, reaction, or sorption during the sample collection, storage, and preparation steps.
  - 2. Documentation of specific quality assurance procedures followed during sampling, sample preparation, sample introduction, and analysis.
  - 3. Measurement of the average accuracy and precision of the specific procedures, including field duplicates and field spiking of the off-site material source before or during sampling with compounds having similar chemical characteristics to the target analytes.
- (H) Method 8270 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846, Third Edition, September 1986, as amended by Update I, November 15, 1992. As an alternative, the Permittee may use any more recent, updated version of Method 8270 approved by the EPA. For the purpose of using Method 8270 to comply with this condition, the Permittee shall maintain a formal quality assurance program consistent with Method 8270, and this program shall include the following elements related to measuring the concentrations of volatile compounds:
  - <u>1.</u> Documentation of site-specific procedures to minimize the loss of compounds due to volatilization, biodegradation, reaction, or sorption during the sample collection, storage, and preparation steps.
  - 2. Documentation of specific quality assurance procedures followed during sampling, sample preparation, sample introduction, and analysis.
  - <u>3.</u> Measurement of the average accuracy and precision of the specific procedures, including field duplicates and field spiking of the off-site material source before or during sampling with compounds having similar chemical characteristics to the target analytes.
- (I) Any other analysis method that has been validated in accordance with the procedures specified in section 5.1 and section 5.3 and the corresponding calculations in section 6.1 or section 6.3 of Method 301 in appendix A in 40 CFR part 63. The data are acceptable if they meet the criteria specified in section 6.1.5 or section 6.3.3 of Method 301. If correction is required under section 6.3.3 of Method 301, the data are acceptable if the correction factor is within the range of 0.7 to 1.30. Other sections of Method 301 are not required.
- (iii) Calculations. The average VOHAP concentration (C) on a massweighted basis shall be calculated by using the results for all samples analyzed in accordance with paragraph (2)(ii) of this section and the following equation. The Permittee using a test method that provides species-specific chemical concentrations may adjust the measured

concentrations to the corresponding concentration values which would be obtained had the off-site material samples been analyzed using Method 305. To adjust these data, the measured concentration for each individual HAP chemical species contained in the off-site material is multiplied by the appropriate species-specific adjustment factor (fm305) listed in Table 1 of 40 CFR 63 Subpart DD.

$$C = \frac{1}{Q_T} \times \sum_{i=1}^{n} (Q_i \times C_i)$$

Where:

C = Average VOHAP concentration of the off-site material at the point-of-delivery on a mass-weighted basis, ppmw.

i = Individual sample "i" of the off-site material.

n = Total number of samples of the off-site material collected (at least 4) for the averaging period (not to exceed 1 year).

Qi = Mass quantity of off-site material stream represented by Ci, kg/hr.

QT = Total mass quantity of off-site material during the averaging period, kg/hr.

Ci = Measured VOHAP concentration of sample "i" as determined in accordance with the requirements of 40 CFR 63.694(a), ppmw.

- (3) Knowledge of the off-site material to determine VOHAP concentration.
  - (i) Documentation shall be prepared that presents the information used as the basis for the Permittee's knowledge of the off-site material stream's average VOHAP concentration. Examples of information that may be used as the basis for knowledge include: material balances for the source or process generating the off-site material stream; species-specific chemical test data for the off-site material stream from previous testing that are still applicable to the current off-site material stream; previous test data for other locations managing the same type of off-site material stream; or other knowledge based on information in documents such as manifests, shipping papers, or waste certification notices.
  - (ii) If test data are used as the basis for knowledge, then the Permittee shall document the test method, sampling protocol, and the means by which sampling variability and analytical variability are accounted for in the determination of the average VOHAP concentration. For example, the Permittee may use HAP concentration test data for the off-site material stream that are validated in accordance with in Method 301 40 CFR part 63, appendix A of 40 CFR 63 as the basis for knowledge of the off-site material.
  - (iii) The Permittee using species-specific chemical concentration test data as the basis for knowledge of the off-site material may adjust the test data to the corresponding average VOHAP concentration value which would be obtained had the off-site material samples been analyzed using Method 305. To adjust these data, the measured concentration for each individual HAP chemical species contained in the off-site material is multiplied by the appropriate species-specific adjustment factor (fm305) listed in Table 1 of 40 CFR 63 Subpart DD.

- (iv) In the event that the Executive Secretary and the Permittee disagree on a determination of the average VOHAP concentration for an off-site material stream using knowledge, then the results from a determination of VOHAP concentration using direct measurement as specified in paragraph (2) of this section shall be used to establish compliance with the applicable requirements of this condition. The Executive Secretary may perform or request that the Permittee perform this determination using direct measurement.
- (b) Procedure for determining no detectable organic emissions for the purpose of complying with this condition.
  - (1) The test shall be conducted in accordance with the procedures specified in Method 21 of 40 CFR part 60, appendix A. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices shall be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: the interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a springloaded pressure-relief valve.
  - (2) The test shall be performed when the unit contains a material having a total organic concentration representative of the range of concentrations for the materials expected to be managed in the unit. During the test, the cover and closure devices shall be secured in the closed position.
  - (3) The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in section 3.1.2(a) of Method 21shall be for the average composition of the organic constituents in the material placed in the unit, not for each individual organic constituent.
  - (4) The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A.
  - (5) Calibration gases shall be as follows:
    - (i) Zero air (less than 10 ppmv hydrocarbon in air); and
    - (ii) A mixture of methane or n-hexane in air at a concentration of approximately, but less than, 10,000 ppmv.
  - (6) The Permittee may choose to adjust or not adjust the detection instrument readings to account for the background organic concentration level. If the Permittee chooses to adjust the instrument readings for the background level, the background level value shall be determined according to the procedures in Method 21 of 40 CFR part 60, appendix A.
  - (7) Each potential leak interface shall be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Method 21. In the case when the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface shall be sampled. In the case when the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet shall be placed at approximately the center of the exhaust area to the atmosphere.
  - (8) The Permittee shall determine if a potential leak interface operates with no detectable emissions using the applicable procedure specified in paragraph (8)(i) or (8)(ii) of this section.

- (i) If the Permittee chooses not to adjust the detection instrument readings for the background organic concentration level, then the maximum organic concentration value measured by the detection instrument is compared directly to the applicable value for the potential leak interface as specified in paragraph (9) of this section.
- (ii) If the Permittee chooses to adjust the detection instrument readings for the background organic concentration level, the value of the arithmetic difference between the maximum organic concentration value measured by the instrument and the background organic concentration value as determined in paragraph (6) of this section is compared with the applicable value for the potential leak interface as specified in paragraph (9) of this section.
- (9) A potential leak interface is determined to operate with no detectable emissions using the applicable criteria specified in paragraphs (9)(i) and (9)(ii) of this section.
  - (i) For a potential leak interface other than a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (8) is less than 500 ppmv.
  - (ii) For a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (8) is less than 10,000 ppmv.
- (c) Procedure for determining a container to be vapor-tight for the purpose of complying with this condition.
  - (1) The test shall be performed in accordance with Method 27 of 40 CFR part 60, appendix A of 40 CFR.
  - (2) A pressure measurement device shall be used that has a precision of  $\pm$  2.5 mm water and that is capable of measuring above the pressure at which the container is to be tested for vapor tightness.
  - (3) If the test results determined by Method 27 indicate that the container sustains a pressure change less than or equal to 750 Pascals within 5 minutes after it is pressurized to a minimum of 4,500 Pascals, then the container is determined to be vapor-tight.
- (d) The Permittee shall inspect the containers greater than 0.1 m³ in size and its cover and closure devices as follows:
  - (1) In the case when a regulated-material already is in the container at the time the Permittee first accepts possession of the container at the facility site and the container is not emptied (i.e., does not meet the conditions for an empty container as defined in this condition) within 24 hours after the container has been accepted at the facility site, the container and its cover and closure devices shall be visually inspected by the Permittee to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. This inspection of the container shall be conducted on or before the date that the container is accepted at the facility (i.e., the date that the container becomes subject to the standards under this condition). For the purpose of this requirement, the date of acceptance is the date of signature of the facility Permittee on the manifest or shipping papers

- accompanying the container. If a defect is detected, the Permittee shall repair the defect in accordance with the requirements of paragraph (3) of this section.
- (2) In the case when a container filled or partially filled with regulated-material remains unopened at the facility site for a period of 1 year or more, the container and its cover and closure devices shall be visually inspected by the Permittee initially and thereafter, at least once every calendar year, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the Permittee shall repair the defect in accordance with the requirements of paragraph (3) of this section.
- (3) When a defect is detected for the container, cover, or closure devices, the Permittee shall either empty the regulated-material from the defective container in accordance with paragraph (3)(i) of this section or repair the defective container in accordance with paragraph (3)(ii) of this section.
  - (i) If the Permittee elects to empty the regulated-material from the defective container, the Permittee shall remove the regulated-material from the defective container to meet the conditions for an empty container (as defined in this condition) and transfer the removed regulated-material to either a container that meets the applicable standards under this condition or to a tank, process, or treatment unit that meets the applicable standards under the subpart referencing this condition. Transfer of the regulated-material shall be completed no later than 5 calendar days after detection of the defect. The emptied defective container shall be either repaired, destroyed, or used for purposes other than management of regulated-material.
  - (ii) If the Permittee elects not to empty the regulated-material from the defective container, the Permittee shall repair the defective container. First efforts at repair of the defect shall be made no later than 24 hours after detection and repair shall be completed as soon as possible but no later than 5 calendar days after detection. If repair of a defect cannot be completed within 5 calendar days, then the regulated-material shall be emptied from the container and the container shall not be used to manage regulated-material until the defect is repaired.
- (e) Closed-vent system monitoring requirements. The permittee shall meet the following inspection and monitoring requirements for the closed vent system required by this condition:
  - (1) The closed-vent system shall be inspected and monitored in accordance with the following requirements:
    - (i) At initial startup, the Permittee shall monitor the closed-vent system components and connections using the procedures specified in section (b) of monitoring to demonstrate that the closed-vent system operates with no detectable organic emissions.
    - (ii) After initial startup, the Permittee shall inspect and monitor the closed-vent system as follows:
      - (A) Closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between two sections of hard piping or a bolted and gasketed ducting flange) shall be visually inspected at least once per year to check for defects that could result in air emissions. The Permittee shall monitor a component or connection using the procedures specified in section (b) of monitoring to

- demonstrate that it operates with no detectable organic emissions following any time the component is repaired or replaced (e.g., a section of damaged hard piping is replaced with new hard piping) or the connection is unsealed (e.g., a flange is unbolted).
- (B) Closed-vent system components or connections other than those specified in paragraph (1)(ii)(A) of this section, shall be monitored at least once per year using the procedures specified in section (b) of monitoring to demonstrate that components or connections operate with no detectable organic emissions.
- (iii) In the event that a defect or leak is detected, the Permittee shall repair the defect or leak in accordance with the requirements of paragraph (2) of this section.
- (2) The Permittee shall repair all detected defects as follows:
  - The Permittee shall make first efforts at repair of the defect no later than 5 calendar days after detection and repair shall be completed as soon as possible but no later than 45 calendar days after detection.
  - (ii) Repair of a defect may be delayed beyond 45 calendar days if either of the conditions specified in paragraph (2)(ii)(A) or (2)(ii)(B) of this section occurs. In this case, the Permittee shall repair the defect the next time the process or unit that vents to the closed-vent system is shutdown. Repair of the defect shall be completed before the process or unit resumes operation.
    - (A) Completion of the repair is technically infeasible without the shutdown of the process or unit that vents to the closed-vent system.
    - (B) The Permittee determines that the air emissions resulting from the repair of the defect within the specified period would be greater than the fugitive emissions likely to result by delaying the repair until the next time the process or unit that vents to the closed-vent system is shutdown.
- (f) *Control device monitoring requirements*. The Permittee shall ensure that each control device operates properly by monitoring the control device in accordance with the requirements specified in paragraphs (1) through (7) of this section.
  - (1) A continuous parameter monitoring system shall be used to measure the operating parameter or parameters specified for the control device in this condition. The continuous parameter monitoring system shall meet the following specifications and requirements:
    - (i) The continuous parameter monitoring system shall measure either an instantaneous value at least once every 15 minutes or an average value for intervals of 15 minutes or less and continuously record either:
      - (A) Each measured data value; or
      - (B) Each block average value for each 1-hour period or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values.
    - (ii) The monitoring system shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's specifications or other written procedures that provide reasonable assurance that the monitoring equipment is operating properly.
  - (2) Using the data recorded by the monitoring system, the Permittee shall calculate the daily average value for each monitored operating parameter for each

- operating day. If operation of the control device is continuous, the operating day is a 24-hour period. If control device operation is not continuous, the operating day is the total number of hours of control device operation per 24-hour period. Valid data points shall be available for 75 percent of the operating hours in an operating day to compute the daily average.
- (3) For each monitored operating parameter, the Permittee shall establish a minimum operating parameter value or a maximum operating parameter value, as appropriate, to define the range of conditions at which the control device shall be operated to continuously achieve the applicable performance requirements specified in the condition. The minimum or maximum operating parameter value shall be established based on the control device design analysis and supplemented, as necessary, by the control device manufacturer recommendations or other applicable information.
- (4) An excursion for a given control device is determined to have occurred when the monitoring data or lack of monitoring data result in any one of the criteria specified in paragraphs (4)(i) through (4)(iii) of this section being met. When multiple operating parameters are monitored for the same control device and during the same operating day more than one of these operating parameters meets an excursion criterion specified in paragraphs (4)(i) through (4)(iii) of this section, then a single excursion is determined to have occurred for the control device for that operating day.
  - (i) An excursion occurs when the daily average value of a monitored operating parameter is less than the minimum operating parameter limit (or, if applicable, greater than the maximum operating parameter limit) established for the operating parameter in accordance with the requirements of paragraph (3) of this section.
  - (ii) An excursion occurs when the period of control device operation is 4 hours or greater in an operating day and the monitoring data are insufficient to constitute a valid hour of data for at least 75 percent of the operating hours. Monitoring data are insufficient to constitute a valid hour of data if measured values are unavailable for any of the 15-minute periods within the hour.
  - (iii) An excursion occurs when the period of control device operation is less than 4 hours in an operating day and more than 1 of the hours during the period does not constitute a valid hour of data due to insufficient monitoring data. Monitoring data are insufficient to constitute a valid hour of data if measured values are unavailable for any of the 15-minute periods within the hour.
- (5) For each excursion, except as provided for in paragraph (6) of this section, the Permittee shall be deemed to have failed to have applied control in a manner that achieves the required operating parameter limits. Failure to achieve the required operating parameter limits is a violation of this standard.
- (6) An excursion is not a violation of this standard under any one of the conditions specified in paragraphs (6)(i) and (6)(ii) of this section.
  - (i) An excursion is not a violation nor does it count toward the number of excused excursions allowed under paragraph (6)(ii) of this section when the excursion occurs during any one of the following periods:
    - (A) During a period of startup, shutdown, or malfunction when the affected facility is operated during such period in accordance with the facility's startup, shutdown, and malfunction plan; or

- (B) During periods of non-operation of the unit or the process that is vented to the control device (resulting in cessation of HAP emissions to which the monitoring applies).
- (ii) For each control device, one excused excursion is allowed per semiannual period for any reason. The initial semiannual period is the 6-month reporting period addressed by the first semiannual report submitted by the Permittee in accordance with paragraph (b)(3) of reporting.
- (7) Nothing in paragraphs (1) through (6) of this section shall be construed to allow or excuse a monitoring parameter excursion caused by any activity that violates other applicable provisions of this condition.

#### II.B.4.b.2

### **Recordkeeping:**

- (a) The Permittee shall comply with the recordkeeping requirements in 40 CFR 63.10 under 40 CFR 63 subpart A—General Provisions that are applicable to this condition as specified in Table 2 of 40 CFR 63 Subpart DD.
- (b) The Permittee shall maintain the records in accordance with the requirements of 40 CFR 63.10 and Section I.S.1 of this permit.
- (c) The Permittee shall record, on a semiannual basis, the information specified in paragraphs (1) and (2) of this section for those planned routine maintenance operations that would require the control device not to meet the requirements of this condition.
  - (1) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6 months. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.
  - (2) A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description shall include the type of maintenance performed and the total number of hours during these 6 months that the control device did not meet the requirement of this condition, due to planned routine maintenance.
- (d) The Permittee shall record the information specified in paragraphs (1) through (3) of this section for those unexpected control device system malfunctions that would require the control device not to meet the requirements of this condition.
  - (1) The occurrence and duration of each malfunction of the control device system.
  - (2) The duration of each period during a malfunction when gases, vapors, or fumes are vented from the waste management unit through the closed-vent system to the control device while the control device is not properly functioning.
  - (3) Actions taken during periods of malfunction to restore a malfunctioning control device to its normal or usual manner of operation.

#### II.B.4.b.3

#### **Reporting:**

- (a) The Permittee shall comply with the reporting requirements in Section I of this permit. In addition, the Permittee shall comply with the notification requirements specified in paragraph (a)(1) of this section and the reporting requirements specified in paragraph (a)(2) of this section.
  - (1) The Permittee shall submit notices to the Executive Secretary in accordance with the applicable notification requirements in 40 CFR 63.9 as specified in Table 2 of 40 CFR 63 Subpart DD.

- (2) The Permittee shall submit reports to the Executive Secretary in accordance with the applicable reporting requirements in 40 CFR 63.10 as specified in Table 2 of 40 CFR 63 Subpart DD.
- (b) The Permittee shall submit the following notifications and reports to the Executive Secretary:
  - (1) A Notification of Performance Tests specified in 40 CFR 63.9(g) of 40 CFR 63,
  - (2) Startup, shutdown, and malfunction reports specified in this permit.
    - (i) If actions taken by the Permittee during a startup, shutdown, or malfunction of an affected emission unit (including actions taken to correct a malfunction) are not completely consistent with the procedures specified in the source's startup, shutdown, and malfunction plan, the Permittee shall state such information in the report. The startup, shutdown, or malfunction report shall consist of a letter, containing the name, title, and signature of the responsible official who is certifying its accuracy, that shall be submitted to the Executive Secretary, and
    - (ii) Separate startup, shutdown, or malfunction reports are not required if the information is included in the summary report specified in paragraph (b)(3)of this section.
  - (3) A summary report specified in this permit of 40 CFR 63 shall be submitted on a semiannual basis (i.e., once every 6-month period). The summary report shall include a description of all excursions as defined in paragraph (5) of section (e) of monitoring of this condition that have occurred during the 6-month reporting period. For each excursion caused when the daily average value of a monitored operating parameter is less than the minimum operating parameter limit (or, if applicable, greater than the maximum operating parameter limit), the report shall include the daily average values of the monitored parameter, the applicable operating parameter limit, and the date and duration of the period that the exceedance occurred. For each excursion caused by lack of monitoring data, the report shall include the date and duration of period when the monitoring data were not collected and the reason why the data were not collected.
- (c) For Container Level 3 controls used in accordance with the provisions of this condition the Permittee shall prepare and maintain records for the most recent set of calculations and measurements performed by the Permittee to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, Appendix B.
- (d) The Permittee shall send a copy of each report submitted to the Executive Secretary to Region 8 of the EPA to the address given in Section I of this permit.

#### II.B.5 Conditions on Off-Site Material Transfer Systems (TRNS)

## II.B.5.a Condition: 40 CFR Part 63, Subpart DD

#### (I) Affected Transfer systems

(a) For each transfer system, the Permittee shall meet the requirements in either paragraph (1), or (2) of this section. *Transfer system means* a stationary system for which the predominant function is to convey liquids or solid materials from one point to another point within a waste management operation or recovery operation. For the purpose of this condition, the conveyance of material using a container (as defined for this condition) or a self-propelled vehicle (e.g., a frontend loader) is not a transfer system. Examples of a transfer system include but are not limited to a pipeline, an individual drain system, a gravity-operated

- conveyor (such as a chute), and a mechanically-powered conveyor (such as a belt or screw conveyor).
- (1) Control air emissions from the transfer system in accordance with the applicable standards specified in section II of this condition.
- (2) Determine before placing off-site material in the transfer system that the average VOHAP concentration of the off-site material is less than 500 parts per million by weight (ppmw) at the point-of-delivery. The Permittee shall perform an initial determination of the average VOHAP concentration of the off-site material using the procedures specified in this permit for containers subject to 40 CFR 63 Subpart DD. This initial determination shall be performed before the first time any portion of the off-site material stream is placed in the transfer system. Thereafter, the Permittee shall review and update, as necessary, this determination at least once every calendar year following the date of the initial determination for the off-site material stream.
- (b) A transfer system is exempted from the requirements in paragraph (a) of this section if the off-site material placed in the unit is a hazardous waste that meets the conditions specified in either paragraph (1) or (2).
  - (1) The hazardous waste meets the numerical organic concentration limits, applicable to the hazardous waste, as specified in 40 CFR part 268—Land Disposal Restrictions, listed in the table, "Treatment Standards for Hazardous Waste" in 40 CFR 268.40.
  - (2) The organic hazardous constituents in the hazardous waste have been treated by the treatment technology established by the EPA for the hazardous waste in 40 CFR 268.42(a), or have been removed or destroyed by an equivalent method of treatment approved by the EPA under 40 CFR 268.42(b).

#### (II) Standards: Transfer systems.

(a) For each affected transfer system, the Permittee shall control air emissions by a transfer system that consists of continuous hard-piping. *Hard-piping means* pipe or tubing that is manufactured and properly installed in accordance with relevant standards and good engineering practices. All joints or seams between the pipe sections shall be permanently or semi-permanently sealed (e.g., a welded joint between two sections of metal pipe or a bolted and gasketed flange).

[Authority granted under 40 CFR 63.689; condition originated in DAQE-168-02]

#### II.B.5.a.1 **Monitoring:**

Each transfer system subject to this condition shall be visually inspected by the Permittee initially and thereafter, at least once every calendar year, to check that the transfer system consists of continuous hard-piping and all joints or seams between the pipe sections are permanently or semi-permanently sealed.

#### **Recordkeeping:**

- (a) The Permittee shall comply with the recordkeeping requirements in 40 CFR 63.10 under 40 CFR 63 subpart A—General Provisions that are applicable to this condition as specified in Table 2 of 40 CFR 63 Subpart DD.
- (b) The Permittee shall maintain the records in accordance with the requirements of 40 CFR 63.10 of 40 CFR 63 and Section I.S.1 of this permit.

## II.B.5.a.3 **Reporting:**

(a) The permittee shall comply with the reporting requirements in Section I of this permit. In addition, the Permittee shall comply with the notification

II.B.5.a.2

- requirements specified in paragraph (a)(1) of this section and the reporting requirements specified in paragraph (a)(2) of this section.
- (1) The Permittee shall submit notices to the Executive Secretary in accordance with the applicable notification requirements in 40 CFR 63.9 as specified in Table 2 of 40 CFR 63 Subpart DD.
- (2) The Permittee shall submit reports to the Executive Secretary in accordance with the applicable reporting requirements in 40 CFR 63.10 as specified in Table 2 of 40 CFR 63 Subpart DD.
- (b) The Permittee shall send a copy of each report submitted to the Executive Secretary to Region 8 of the EPA to the address given in Section I of this permit

# II.B.6 Conditions on Off-Site Material Tanks (TNKS)

### II.B.6.a Condition: 40 CFR Part 61 Subpart FF

#### (I) Tank Management

- (a) The Permittee shall meet the following standards for each affected tank
  - (1) The Permittee shall install, operate, and maintain a fixed-roof and closed-vent system that routes all organic vapors vented from the tank to a control device meeting the requirements in section II of this condition. The fixed-roof shall meet the following requirements:
    - (i) The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be designed to operate with no detectable emissions as indicated by an instrument reading less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in (c) of monitoring.
    - (ii) Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the tank except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.
    - (iii) If the cover and closed-vent system operate such that the tank is maintained at a pressure less than atmospheric pressure, then paragraph (a)(1)(ii) of this section does not apply to any opening that meets all of the following conditions:
      - (A) The purpose of the opening is to provide dilution air to reduce the explosion hazard;
      - (B) The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in (c) of monitoring; and
      - (C) The pressure is monitored continuously to ensure that the pressure in the tank remains below atmospheric pressure.
  - (2) The Permittee must install, operate, and maintain an enclosure and closed-vent system that routes all organic vapors vented from the tank, located inside the enclosure, to an enclosed combustion control device in accordance with the requirements specified in paragraph (d) below.
- (b) Each fixed-roof, seal, access door, and all other openings shall be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur and that access doors and other openings are closed and gasketed properly.
- (c) Except as provided in IV of this condition, when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at

- repair shall be made as soon as practicable, but not later than 45 calendar days after identification.
- (d) If the permittee controls air pollutant emissions by using an enclosure vented through a closed-vent system to an enclosed combustion control device, the following requirements must be met:
  - (1) The tank must be located inside a total enclosure. The enclosure must be designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" in 40 CFR 52.741, appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The owner or operator must perform the verification procedure for the enclosure as specified in section 5.0 of Procedure T initially when the enclosure is first installed and, thereafter, annually. A facility that has conducted an initial compliance demonstration and that performs annual compliance demonstrations in accordance with the requirements for Tank Level 2 control requirements 40 CFR 264.1084(i) or 40 CFR 265(i) is not required to make repeat demonstrations of initial and continuous compliance for the purposes of this subpart.
  - (2) (reserved)
  - (3) Safety devices, as defined in 40 CFR Part 61.341, may be installed and operated as necessary on any enclosure, closed-vent system, or control device used to comply with the requirements of paragraphs (1) and (2) above.
  - (4) The closed-vent system must be designed and operated in accordance with the requirements of 40 CFR 61.349.

#### (II) Closed Vent System and Control Device

- (a) The closed-vent system and control device shall be designed and operated in accordance with the following requirements.
  - (1) The closed-vent system shall:
    - (i) Be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in (c) of monitoring.
    - (ii) All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
  - (2) The control devices shall be designed and operated in accordance with the following conditions:
    - (i) The incinerator shall provide a minimum residence time of 0.5 seconds at a minimum temperature of 760°C (1,400 °F).
    - (ii) The carbon adsorption systems shall recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater.
- (b) The closed-vent system and incinerator or carbon adsorption system shall be operated at all times when waste is placed or present in an affected tank and the tank is vented to the incinerator or carbon adsorption system.
- (c) The Permittee shall demonstrate that each control device achieves the appropriate conditions specified in paragraph (a)(2) of this section by using engineering calculations in accordance with requirements specified in (e) of recordkeeping.
- (d) The Executive Secretary may request at any time the Permittee demonstrate that a control device meets the applicable conditions specified in paragraph (a)(2) of

- this section by conducting a performance test using the test methods and procedures as required in 40 CFR 61.355.
- (e) Each closed-vent system and control device shall be visually inspected initially and quarterly thereafter. The visual inspection shall include inspection of ductwork and piping and connections to covers and control devices for evidence of visible defects such as holes in ductwork or piping and loose connections.
- (f) Except as provided in section IV of this condition, if visible defects are observed during an inspection, or if other problems are identified, or if detectable emissions are measured, a first effort to repair the closed-vent system and control device shall be made as soon as practicable but no later than 5 calendar days after detection. Repair shall be completed no later than 15 calendar days after the emissions are detected or the visible defect is observed.

### (III) Treatment Standards

- (a) Incinerator
  - (1) The Permittee shall treat affected waste in affected tanks in accordance with the following requirements:
    - (i) The Permittee shall design, install, operate, and maintain a treatment process that destroys benzene in the waste by incinerating the waste in a combustion unit that achieves a destruction efficiency of 99 percent or greater for benzene.
    - (ii) The Permittee may aggregate or mix together individual wastes to create a combined waste for the purpose of facilitating treatment of waste to comply with the requirements of paragraph (a)(1)(i) of this section.
  - (2) A treatment process is in compliance with the requirements of this condition provided that the Permittee has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 264, subpart 0.
  - (3) Except as specified in paragraph (a)(3)(iii) of this section, if the treatment process has any openings (e.g., access doors, hatches, etc.), all such openings shall be sealed (e.g., gasketed, latched, etc.) and kept closed at all times when waste is being treated, except during inspection and maintenance.
    - (i) Each seal, access door, and all other openings shall be checked by visual inspections initially and quarterly thereafter to ensure that no cracks or gaps occur and that openings are closed and gasketed properly.
    - (ii) Except as provided in section IV of this condition, when a broken seal or gasket or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.
    - (iii) If the cover and closed-vent system operate such that the treatment process is maintained at a pressure less than atmospheric pressure, the Permittee may operate the system with an opening that is not sealed and kept closed at all times if the following conditions are met:
      - (A) The purpose of the opening is to provide dilution air to reduce the explosion hazard;
      - (B) The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in (c) of monitoring; and
      - (C) The pressure is monitored continuously to ensure that the pressure in the treatment process remains below atmospheric pressure.

(D) Treatment process system pressures not less than atmospheric pressure shall be addressed by the Compliance Plan and Schedule found in Section V of this permit. [Authority granted under R307-415-6c(3); Condition originated in Title V Application as amended June 12, 2003].

#### Send Offsite (b)

- (1) Rather than treating the waste onsite, the Permittee may elect to transfer affected wastes offsite to another facility where the waste is treated in accordance with the requirements of 40 CFR 61.342(c)(1)(i). If the Permittee transfers the waste offsite, the permittee shall:
  - (i) Comply with the standards of this condition prior to shipment of the waste offsite.
  - Include with each offsite waste shipment a notice stating that the waste (ii) contains benzene which is required to be managed and treated in accordance with the provisions of 40 CFR 61 Subpart FF.

# (IV) Delay of repair.

- Delay of repair will be allowed if the repair is technically impossible without a complete or partial facility or unit shutdown.
- Repair of such equipment shall occur before the end of the next facility or unit (b)

[Authority granted under 40 CFR 61.343; condition originated in 40 CFR 61.343]

#### **Monitoring:**

- (a) The Permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor the control device operation as specified in the following paragraphs. The Permittee shall inspect at least once each operating day the data recorded by the monitoring equipment (e.g., temperature monitor or flow indicator) to ensure that the control device is operating properly.
  - (1) For the incinerator, a temperature-monitoring device equipped with a continuous recorder. The device shall have an accuracy of  $\pm 1$  percent of the temperature being monitored in  $^{\circ}$ C or  $\pm 0.5^{\circ}$ C, whichever is greater. The temperature sensor shall be installed at a representative location in the combustion chamber.
- (b) The Permittee shall replace the carbon in the carbon adsorption system with fresh carbon at a regular predetermined time interval that is less than the carbon replacement interval that is determined by the maximum design flow rate and either the organic concentration or the benzene concentration in the gas stream vented to the carbon adsorption system.
- (c) The Permittee shall test equipment for compliance with no detectable emissions in accordance with the following requirements:
  - (1) Monitoring shall comply with Method 21 from appendix A of 40 CFR part
  - (2) The detection instrument shall meet the performance criteria of Method 21.
  - (3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21.

#### II.B.6.a.1

- (4) Calibration gases shall be:
  - (i) Zero air (less than 10 ppm of hydrocarbon in air); and
  - (ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.
- (5) The background level shall be determined as set forth in Method 21.
- (6) The instrument probe shall be traversed around all potential leak interfaces as close as possible to the interface as described in Method 21.
- (7) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared to 500 ppm for determining compliance.
- (8) For each system using an emission control that is maintained at a pressure less than atmospheric pressure with openings to provide dilution air, the Permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications a device equipped with a continuous recorder to monitor the pressure in the unit to ensure that it is less than atmospheric pressure.

#### II.B.6.a.2

### **Recordkeeping:**

- (a) The Permittee shall comply with the recordkeeping requirements of section I.S.1 of this permit. In addition, each record shall be maintained in a readily accessible location at the facility site for a period not less than five years from the date the information is recorded unless otherwise specified.
- (b) The Permittee transferring waste off-site to another facility for treatment in accordance with (b) of section III of this condition shall maintain documentation for each offsite waste shipment that includes the following information: Date waste is shipped offsite, quantity of waste shipped offsite, name and address of the facility receiving the waste, and a copy of the notice sent with the waste shipment.
- (c) The Permittee shall maintain engineering design documentation for all control equipment required by this condition that is installed on the tanks. The documentation shall be retained for the life of the control equipment.
- (d) The Permittee shall maintain the following records for the treatment unit. The documentation shall be retained for the life of the unit. A statement signed and dated by the Permittee certifying that the unit is permitted as a 40 CFR 264 Subpart O incinerator.
- (e) For the closed-vent systems and control devices, the Permittee shall maintain the following records. The documentation shall be retained for the life of the control devices.
  - (1) A statement signed and dated by the Permittee certifying that the closed-vent systems and control devices are designed to operate at the documented performance level when the waste management unit vented to the control device is or would be operating at the highest load or capacity expected to occur.
  - (2) A design analysis for the control device that includes for example:
    - (i) Specifications, drawings, schematics, and piping and instrumentation diagrams prepared by the Permittee, or the control device manufacturer or vendor that describe the control device design based on acceptable engineering texts. The design analysis shall address the following vent stream characteristics and control device operating parameters:
      - (A) For the incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average

- temperature in the combustion zone and the combustion zone residence time.
- (B) For the carbon adsorption systems, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level or the design exhaust vent stream benzene concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.
- (f) The Permittee shall maintain a record for each visual inspection that identifies a problem (such as a broken seal, gap or other problem) which could result in benzene emissions. The record shall include the date of the inspection, waste management unit and control equipment location where the problem is identified, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed.
- (g) The Permittee shall maintain a record for each test of no detectable emissions. The record shall include the following information: date the test is performed, background level measured during test, and maximum concentration indicated by the instrument reading measured for each potential leak interface. If detectable emissions are measured at a leak interface, then the record shall also include the waste management unit, control equipment, and leak interface location where detectable emissions were measured, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed.
- (h) The Permittee shall maintain documentation that includes the following information regarding the treatment unit operation:
  - (1) Dates of startup and shutdown of the unit.
  - (2) Periods when the unit is not operated as designed.
- (i) For each control device, the Permittee shall maintain documentation that includes the following information regarding the control device operation:
  - (1) Dates of startup and shutdown of the closed-vent system and control device.
  - (2) A description of the operating parameter (or parameters) to be monitored to ensure that the control device will be operated in conformance with these standards and the control device's design specifications and an explanation of the criteria used for selection of that parameter (or parameters). This documentation shall be kept for the life of the control device.
  - (3) Periods when the closed-vent system and control device are not operated as designed.
  - (4) The Permittee shall maintain continuous records of the temperature of the gas stream in the combustion zone of the incinerator and records of all 3-hour periods of operation during which the average temperature of the gas stream in the combustion zone is more than 28°C (50 °F) below the design combustion zone temperature.
  - (5) The Permittee shall record each occurrence when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time.
  - (6) For the carbon adsorbers, the Permittee shall maintain records of dates and times when the control device is monitored, and shall record the date and time that the existing carbon in the control device is replaced with fresh carbon.

- (j) If a system is used for emission control that is maintained at a pressure less than atmospheric pressure with openings to provide dilution air, then the Permittee shall maintain records of the monitoring device and records of all periods during which the pressure in the unit is operated at a pressure that is equal to or greater than atmospheric pressure.
- (k) If a total enclosure is used to comply with the control requirements for tanks, then the permittee must keep records (1) and (2) listed below. The permittee may use records as required in 40 CFR 264.1089(b)(2)(iv) or 40 CFR 265.1090(b)(2)(iv) to meet the recordkeeping requirement in paragraph (1) below. The owner or operator must make the records of each verification of a total enclosure available for inspection upon request.
  - (1) Records of the most recent set of calculations and measurements performed to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" in 40 CFR 52.741, appendix B;
  - (2) Records required for a closed-vent system and control device according to the requirements in paragraphs (d), (f) and (j) above.

### **Reporting:**

- (a) The permittee shall comply with the reporting requirements in Section I of this Permit. In addition, the permittee shall submit a report that includes the following information according to the schedule provided below.
- (b) The Permittee shall submit to the Executive Secretary the following reports:
  - (1) Prior to the date the total annual benzene quantity from waste received from applicable waste generators is equal to or greater than 10 Mg/yr, a certification that the equipment necessary to comply with these standards has been installed and that the required initial inspections or tests have been carried out in accordance with this condition.
  - (2) Beginning 3 months after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (b)(1) of this section, the Permittee shall submit quarterly to the Executive Secretary a certification that all of the required inspections have been carried out in accordance with the requirements of this condition.
  - (3) Beginning 3 months after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (b)(1) of this section, the Permittee shall submit a report quarterly to the Executive Secretary that includes:
    - (i) Each period of operation monitored during which any of the following conditions occur, as applicable to the control device:
      - (A) Each 3-hour period of operation during which the average temperature of the gas stream in the combustion zone of the incinerator, as measured by the temperature monitoring device, is more than 28°C (50 °F) below the design combustion zone temperature.
      - (B) Each occurrence when the carbon in a carbon adsorber system is not replaced at the predetermined interval.
    - (ii) For a cover and closed-vent system monitored in accordance with (d) of monitoring, the Permittee shall submit a report quarterly to the Executive Secretary that identifies any period in which the pressure in the unit is equal to or greater than atmospheric pressure.

#### II.B.6.a.3

- (4) Beginning one year after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (b)(1) of this section, the Permittee shall submit annually to the Executive Secretary a report that summarizes all inspections during which detectable emissions are measured or a problem (such as a broken seal, gap or other problem) that could result in benzene emissions is identified, including information about the repairs or corrective action taken.
- (c) Certified Progress Reports. [Authority granted under R307-415-6c(4); Condition originated in Title V Application as amended June 12, 2003]

The permittee shall also submit certified progress reports every month until all specified milestones in Section V of this permit have been completed. The certified project reports shall contain the following information:

- (1) Dates for achieving the activities, milestones, or compliance required in Section V and dates when such activities, milestones or compliance were achieved; and
- (2) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

The first certified progress report will be due one month from the date that this permit is issued.

(d) The Permittee shall send a copy of each report submitted to the Executive Secretary to Region 8 of the EPA to the address given in Section I of this permit.

#### II.B.7 Conditions on Fuel Oil Tank (TNK5)

#### II.B.7.a **Condition:**

The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the source. [Authority granted under 40 CFR 60.116b(b); condition originated in DAQE-168-02]

#### II.B.7.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

#### II.B.7.a.2 **Recordkeeping:**

Records documenting the dimensions and capacity of the affected unit shall be maintained. A copy of the records shall be made available to the Executive Secretary upon request.

#### II.B.7.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.8 Conditions on Soda Ash Bin (SODA)

#### II.B.8.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-168-02]

#### II.B.8.a.1 **Monitoring:**

If an affected emission unit is operated during a calendar quarter, an opacity observation of the emission unit shall be performed in the quarter that the emission unit was operated. The opacity observation can be conducted at anytime during the quarter. The opacity observation shall be conducted by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9, while the emission unit is operating. If visible emissions other than condensed water vapor are observed from the emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial visual emission observation. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.

### II.B.8.a.2 **Recordkeeping:**

Results from opacity observations and all data required by 40 CFR 60, Appendix A, Method 9 shall be recorded and maintained in accordance with Provision I.S.1 of this permit.

## II.B.8.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

## II.B.9 Conditions on Diesel Engine for Generator (GEN)

#### II.B.9.a **Condition:**

Emergency generators shall be used for electricity producing operation only during the periods when electric power from the public utilities is interrupted or during maintenance. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-168-02]

#### II.B.9.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

### II.B.9.a.2 **Recordkeeping:**

Records of hours of operation for maintenance firing purposes and emergency use shall be kept on a monthly basis for each affected emission unit. Results of monitoring shall be maintained as described in Provision I.S.1 of this permit.

#### II.B.9.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.9.b **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-168-02]

#### II.B.9.b.1 **Monitoring:**

If an affected emission unit is operated during a calendar quarter, an opacity observation of the emission unit shall be performed in the quarter that the emission unit was operated. The opacity observation can be conducted at anytime during the quarter. The opacity observation shall be conducted by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9, while the emission unit is operating. If visible emissions other than condensed water vapor are observed from the emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial visual emission observation. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.

### II.B.9.b.2 **Recordkeeping:**

Results from opacity observations and all data required by 40 CFR 60, Appendix A, Method 9 shall be recorded and maintained in accordance with Provision I.S.1 of this permit.

## II.B.9.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.10 Conditions on Diesel Engine for Water Pump (PUMP)

#### II.B.10.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-168-02]

### II.B.10.a.1 **Monitoring:**

If an affected emission unit is operated during a calendar quarter, an opacity observation of the emission unit shall be performed in the quarter that the emission unit was operated. The opacity observation can be conducted at anytime during the quarter. The opacity observation shall be conducted by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9, while the emission unit is operating. If visible emissions other than condensed water vapor are observed from the emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial visual emission observation. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.

#### II.B.10.a.2 **Recordkeeping:**

Results from opacity observations and all data required by 40 CFR 60, Appendix A, Method 9 shall be recorded and maintained in accordance with Provision I.S.1 of this permit.

#### II.B.10.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.C. Emissions Trading.

(R307-415-6a(10))

Not applicable to this source.

#### **II.D.** Alternative Operating Scenarios.

(R307-415-6a(9))

Not applicable to this source.

# **Section III: PERMIT SHIELD**

A permit shield was not granted for any specific requirements.

# Section IV: ACID RAIN PROVISIONS.

This source is not subject to Title IV. This section is not applicable.

# SECTION V: COMPLIANCE PLAN AND SCHEDULE<sup>1</sup>.

Clean Harbors Aragonite LLC (CHA) shall install the identified equipment and implement the procedures and programs listed below by the dates indicated:

- ?? Installation of a Roberoller decant station shall be complete July 2003 (Installation has been completed).
- ?? A Hydrocarbon (HC) stack monitor shall be installed by September 30, 2003 (Installation has been completed).
- ?? Operator-implemented procedure development program:
  - Training sessions shall be conducted regarding MACT automatic waste feed cut-off (AWFCO) requirements and deviations from Title V Permit Conditions: II.B.2.k, II.B.2.s, II.B.2.t, II.B.2.u, II.B.4.a, and II.B.6.a.
  - o The AWFCO cutoff log kept by the control operator shall be changed to categorize MACT and AO cutoffs.

("Operator-implemented procedure development program" is now in place)

<sup>&</sup>lt;sup>1</sup> Background information on the Compliance Plan and Schedule can be found in the review comments at the end of this permit.

- ?? The amount of emissions caused by afterburner overpressure shall be measured by September 30, 2003. The data shall be used to request relief and if necessary formulate a program to control the emissions.
  - (Measurements of emissions from afterburner overpressure have been made).
- ?? CHA shall develop an operating procedure to avoid MACT required cutoffs and deviations from Title V Permit Conditions (II.B.2.k, II.B.2.s, II.B.2.t, II.B.2.u, II.B.4.a, and II.B.6.a) when AWFCO's required by RCRA or TSCA occur. The operating procedure shall be in place by September 30, 2003.
  - (CHA now has the above referenced procedure in place)
- ?? CHA shall conduct weekly reviews of the number of MACT category AWFCO's, the reason for them, and corrective action needed. Corrective Actions will be initiated based upon the weekly reviews. Records of weekly reviews and corrective actions shall be maintained.
- ?? CHA shall report the number of AWFCO's monthly and estimate the reduction in AWFCO's for the duration of the extension as part of that report. The reports will also include the number of deviations from Title V Permit Conditions: II.B.2.k, II.B.2.s, II.B.2.t, II.B.2.u, II.B.4.a, and II.B.6.a.
- ?? A certified progress report shall be submitted every six-months in accordance with R307-415-5c(8)(d). The above referenced report may be submitted with the six-month monitoring report required by R307-415-6a(3)(c)(i).

### REVIEWER COMMENTS

This operating permit incorporates all applicable requirements contained in the following documents:

DAQE-168-02 dated February 26, 2002

# 1. Comment on an item originating in DAQE-168-02 regarding Off-Site Material Tanks (Unit TNKS)

40 CFR 60 Subpart Kb Subsumed and 40 CFR 63 Subpart DD Exemption: The subject emission unit includes various off-site material tanks which store sludges, liquids, and solids. These tanks are subject to 40 CFR 61 Subpart FF and 40 CFR 63 Subpart DD. In accordance with 40 CFR 63.683(b)(2)(i), the tanks are exempted from controls under Subpart DD because they are also subject to Subpart FF, and the Permittee is controlling the HAPs listed in Table 1 of Subpart DD that are emitted from the tanks in compliance with the provisions specified in Subpart FF. Therefore, the tank control requirements of Subpart DD have not been included in this permit.

The off-site material tanks which store liquids are also subject to 40 CFR 60 Subpart Kb. The requirements of 40 CFR 61 Subpart FF are more stringent than those of 40 CFR 60, Subpart Kb. Therefore, the 40 CFR 60 Subpart Kb requirements have been subsumed by the requirements of 40 CFR 61 Subpart FF. [Comment last updated on 10/09/2002]

# 2. Comment on an item originating in DAQE-168-02 regarding Off-Site Material Containers (Unit CNT)

40 CFR 63 Subpart DD Exemption: The subject emission unit includes various containers or portable units used to hold material including drums, dumpsters, roll-off boxes, bulk cargo containers commonly known as "portable tanks" or "totes", and cargo tank trucks. Containers which contain benzene and are received from chemical manufacturing plants, coke by-product recovery plants, and petroleum refineries which have a total annual benzene quantity greater than 10 Mg/yr are subject to 40 CFR 61 Subpart FF and 40 CFR 63 Subpart DD. In accordance with 40 CFR 63.683(b)(2)(i), these containers are exempted from controls under Subpart DD because they are also subject to Subpart FF, and the Permittee is controlling the HAPs listed in Table 1 of Subpart DD that are emitted from the containers in compliance with the provisions specified in Subpart FF. Therefore, the container control requirements of Subpart DD have not been applied to containers subject to Subpart FF. Those containers which contain off-site materials as defined in Subpart DD with a capacity greater than 0.1 m3 which are not subject to Subpart FF must comply with the container requirements of Subpart DD. [Comment last updated on 10/09/2002]

# 3. Comment on an item originating in 40 CFR 63 Subpart DD regarding Liquid Off-Site Material Tank Farm (Unit TNK1)

Tank Pressure Relief Devices: During the review of the document it was agreed that the tank breathing valves were part of the closed vent system and were not covered by this section. [Comment last updated on 10/01/2002]

# 4. Comment on an item originating in DAQE-168-02 regarding Incineration System (Unit INC)

No carbon injection limit prior to September 30, 2003: The subject approval order requires that a limit for carbon injection be established based on a RCRA trial burn or 40 CFR 63 Subpart EEE comprehensive performance test. The trial burn or comprehensive performance test used must demonstrate compliance with the dioxin/furan and mercury emission limits for the subject emission unit. However (in accordance with the subject approval), prior to the compliance date of 40 CFR 63 Subpart EEE, the permittee may operate at a lower activated carbon feed rate than demonstrated during a RCRA trial burn if the Executive Secretary approves. As approved by the Executive Secretary in attachment 1 of the subject approval order, the permittee is not required to inject activated carbon at this time. Therefore, no monitoring is required until the compliance date of 40 CFR 63 Subpart EEE provided the permittee uses carbon to comply with the dioxin/furan and mercury emission limits of this permit. [Comment last updated on 10/09/2002]

# 5. Comment on an item originating in 40 CFR 61 Subpart E regarding Incineration System (Unit INC)

Alternative Mercury Monitoring: The National Emission Standards for Mercury under 40 CFR 61 Subpart E allow the permittee to document compliance with the Mercury emission standard of 40 CFR 61.52(b) by stack testing in accordance with 40 CFR 61.53 or alternatively by sludge sampling in accordance with 40 CFR 61.54. The permittee has selected sludge sampling, therefore, only the provisions of 40 CFR 61.54 have been included in this permit. 40 CFR 61 Subpart E only requires an initial test. However, in accordance with R307-165, testing at least once every five years is required. [Comment last updated on 10/30/2002]

# 6. Comment on an item originating in 40 CFR 61 Subpart C regarding Incineration System (Unit INC)

Beryllium Emission Level: The National Emission Standards for Beryllium under 40 CFR 61 Subpart C require that, following a stack test, the maximum Beryllium content of the waste not be increased until a new emission level has been estimated by calculation and the results reported to the Executive Secretary. In accordance with 40 CFR 61.33(c), Clean Harbors submitted a new emission level in a letter dated October 2, 2002. The emission level is 10 grams over a 24-hour period. This emission level is the same as the emission standard of 40 CFR 61.32(a) As supported by the October 2, 2002 letter, Clean Harbors can feed up to 5.0 lbs of Beryllium per hour. [Comment last updated on 10/30/2002]

# 7. Comment on an item originating in 40 CFR 61 Subpart FF regarding Offsite Material Management Unit (GRP)

Total Annual Benzene Quantity: The National Emission Standards for Benzene Waste Operations under 40 CFR 61 Subpart FF require the permittee to determine the total annual benzene quantity (TAB) from facility waste by the procedure of 40 CFR

61.355(a). This procedure requires specific calculations to determine the annual benzene quantity for each waste stream where a waste stream means the waste generated by a particular process unit, product tank, or waste management unit. Since the permitted source does not generate waste, the permittee has chosen to rely on the flow-weighted annual average benzene concentration [see 40 CFR 61.355(a)(1)(ii)] listed on the waste profile provided by the generator for each specific waste stream. This procedure is allowed by 40 CFR 61.355(c)(1).

If the TAB is less than 10 Mg/yr, the permittee is not required to treat all wastes received from chemical manufacturing plants, coke by-product recovery plants and petroleum refineries in accordance with 40 CFR 61 Subpart FF. However, any waste received which has notice from the generator prepared in accordance with 40 CFR 61.342(f) must be managed and treated in accordance with 40 CFR 61 Subpart FF as described in the EPA document, "Benzene NESHAP FAQ Handbook for Subparts BB and FF". [Comment last updated on 10/30/2002]

# 8. Comment on an item originating in 40 CFR 63 Subpart DD regarding Offsite Material Management Unit (GRP)

General Provisions: The Offsite Material Management Unit at the permitted source is subject to 40 CFR 63 Subpart DD which requires emissions controls for tanks, transfer systems, equipment leaks and containers which are used to handle offsite materials as defined in 40 CFR 63.681. As described previously, the offsite material management tanks and containers subject to 40 CFR 61 Subpart FF are exempted from the tank and container control requirements of 40 CFR 63 Subpart DD. However, these tanks and containers are still subject to all applicable provisions of 40 CFR 63 Subpart A including the O&M and SSMP requirements of 40 CFR 63 Subpart A. The O&M and SSMP requirements of 40 CFR 63 Subpart A have been included directly in this permit. Other applicable requirements of 40 CFR 63 Subpart A have been referenced. [Comment last updated on 10/30/2002]

# 9. Comment on an item originating in DAQE-168-02 regarding Incineration System (Unit INC)

Startup, Shutdown and Malfunction Plan (SSMP): Pursuant to approval order DAQE-168-02, the permittee is required to have a SSMP for the incinerator prepared in accordance with 40 CFR 63 Subpart A at this time. Therefore, the SSMP requirements of 40 CFR 63 Subpart A have been included in this permit. On and after the compliance date of 40 CFR 63 Subpart EEE, the incinerator will also be subject to all other applicable requirements of 40 CFR 63 Subpart A. [Comment last updated on 10/30/2002]

# 10. Comment on an item originating in DAQE-168-02, and 40 CFR Part 63 Subparts A and EEE regarding Incineration System (Unit INC).

#### Background:

Clean Harbors-Aragonite (CHA) has two separate requirements that call for a compliance plan. They have elected to submit a combined compliance plan to satisfy both requirements. The first requirement for a compliance plan resulted from a Source Compliance Action Notice (SCAN) issued by the Utah Division of Air Quality (DAQ), March 24, 2003, to CHA for exceeding operation and emissions limits in their Approval Order (AO) DAQE-168-02. The second requirement for a compliance plan

resulted from the CHA request for a one-year extension from the Hazardous Waste Combustor MACT (HWC MACT). It makes sense to combine the two plans because they both essentially deal with the same root issues that make compliance with the AO and HWC MACT problematic. These issues include automatic waste feed cutoffs (AWFCO) caused by: intermittent burning of energetic waste; RCRA and TSCA requirements; and the method used for monitoring combustion efficiency.

CHA will reduce the number of AWFCOs and AO exceedances at the Aragonite site using a program that includes both installation of equipment and operator implemented procedure changes. CHA will install:

- Equipment that will allow containers of energetic waste to be decanted to a Roberoller and fed to the incinerator using a pump and piping. The Roberoller decant station will allow the facility to feed energetic drummed waste to the kiln continuously and avoid much of the intermittent feed of energetic waste in drums that may cause AWFCOs and AO exceedances.
- A Hydrocarbon (HC) stack monitor. Subpart EEE allows either an HC or CO monitor to be used as the CEM. Data from other facilities indicates that there may be fewer cutoffs using a HC CEM. When the HC monitor is installed, CHA will request that the HC monitor be used to evaluate combustion effectiveness and that the CO monitor no longer be required.
- o CHA's operator implemented procedure development program will involve both training and operator-directed change. The program is described in Section V, and will be coordinated with the installation of the new equipment. [Comment last updated on 10/30/2002]